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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1911

VOLUME I

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THE UNITED STATES.

BUREAU OF EDUCATION.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, March 29, 1912.

SIR: The Annual Reports of the Commissioner of Education show a constant and rapid increase from year to year in the number and size of schools of all grades, in the value of property used for educational purposes, and in the current expenditures for the support of schools, libraries, and other educational institutions. The summary survey of the progress of education in this country in the first decade of the present century, made by Dr. Fletcher B. Dresslar, of this bureau, and published in this the first volume of the Report of the Commissioner of Education for the year ended June 30, 1911, shows a most remarkable advance. Never have the people shown more clearly their interest and faith in education and in schools of all kinds and grades. Within the decade the average length of the public-school term in the country as a whole increased 12 days, or $8\frac{1}{3}$ per cent. The average number of days attended by each child enrolled in the public schools increased 13.6 days, or a little more than 13.7 per cent. The number of teachers in the public schools increased nearly 20 per cent. The average monthly salary for male teachers increased about 35 per cent; for female teachers about 25 per cent. Because of the increase in the length of the school term this makes the increase in the average annual salary of male teachers about 38 per cent and of female teachers about 27 per cent. The value of all public-school property increased more than 75 per cent, the income of public-schools more than 83 per cent. The number of children in public kindergartens increased more than 40 per cent. The number of public high schools in the country increased more than 70 per cent; the number of public high-school pupils more than 76 per cent. The appropriations of public funds for normal schools for the education and professional training of teachers increased 140 per cent. The number of students in professional courses in public normal schools increased 68 per cent. The productive endowments of universities, colleges, and schools of technology increased 65 per cent. The incomes of such institutions, exclusive of additions to endowments, increased 173 per cent. Professors and instructors increased 61 per cent and the number of students 67 per cent. The standards of high schools and colleges have been raised perceptibly. Attendance laws have been

extended, made more effective, and better enforced than formerly. Much has been done in adapting the work of the schools to the needs of life, modifying courses of study, and introducing new subjects, principally vocational subjects. Public libraries have been opened in many cities not formerly having them, and some progress has been made in making books accessible to people in the open country and away from the centers of population. Within the decade there has been much improvement in school administration, both in city and in country, and a tendency toward a closer and more effective organization of the school systems of the several States has grown rapidly. Several great foundations for the advancement of education, such as the General Education Board, the Carnegie Foundation for the Advancement of Teaching, the Russell Sage Foundation, etc., have been established by private individuals. Churches, philanthropic societies, and private individuals have shown increased interest in education, and the number of private and parochial schools has grown steadily. Within the decade the percentage of illiteracy for all classes of people of the United States has decreased from 10.7 per cent to 7.7 per cent; for native whites from 4.6 per cent to 3 per cent; for colored people from 44.5 per cent to 30.5 per cent.

The progress in those States in which for many reasons there had been less development before the beginning of the decade has been still more remarkable than that indicated by the progress for the country as a whole.

Everywhere the importance and necessity of education for civic, economic, social, and spiritual welfare are recognized more than ever before. In few communities does there exist any longer much antagonism in the minds of the people between the elementary and the higher schools. Much less often than formerly does one hear it asserted that the State's duty in regard to education ends with the establishment and maintenance of elementary and grammar schools. More and more all education is regarded as a unit.

This progress in interest, equipment, adaptation, and appreciation is very gratifying, but it serves chiefly to call attention to the vast amount yet to be done before we shall have begun to attain anything like the ideal of education necessary in our civic, industrial, and social democracy. The individual and social welfare alike demand the highest and best possible education for every individual, and a constant readjustment of ideals and methods to the everchanging requirements of our developing institutions.

According to the Federal Census of 1910, there were in the United States at the time this census was taken 5,517,608 persons 10 years of age and over unable to read and write. Of these, 1,535,530 were native whites, 1,650,519 foreign whites, and 2,331,559 colored. A very much larger number could barely read and write.

Of twenty-five million children of school age (5 to 18), less than twenty million are enrolled in schools of all kinds and grades, public and private, and the average daily attendance does not exceed fourteen million, for an average school term of less than 8 months of 20 days each. The average daily attendance of those enrolled in the public schools is only 113 days in the year, less than $5\frac{3}{4}$ months. The average attendance of the entire school population is only $80\frac{1}{2}$ days, or 4 months of 20 days each. Assuming that this rate of attendance shall continue through the 13 school years (5 to 18), the average amount of schooling received by each child of the school population will be 1,046 days, or a little more than 5 years of 10 school months. This bureau has no reliable statistics on the subject, but it is quite probable that less than half the children of the country finish well more than the first 6 grades, only about one-fourth of the children ever enter high school, and less than 8 in every 100 do the full 4 years of high-school work. Fewer than 5 in 100 receive any education above the high school.

But a knowledge of averages alone is not sufficient for a clear understanding of what is being done for the education of our future citizens. One needs to know what is done in the several States and for individuals. In 10 States less than two-thirds of the school population are enrolled; in 17 States less than two-thirds of those enrolled are in average daily attendance. In 26 States the average length of a school term is less than 160 days, or 8 months. In several States it is little more than 100 days. In 42 States the average attendance of the children of school age is less than 100 days; in 19 States less than 75 days; in 5 States less than 50 days. In no State is it more than 114 days. Of children enrolled the average daily attendance is less than 100 days in 19 States and less than 75 days in 5 States. The expenditure for public education is less than $5 per capita in 25 States and less than $2.50 per capita in 10 States. In 10 States the expenditure per capita of average attendance is less than $15; in 2 States it is less than $8. The average for all of the Southern States is barely $14. In 11 States the average annual salary of teachers is less than $400; in 8 it is less than $300; in 2 less than $250. For salaries like these it is clearly impossible to hire the services of men and women of good native ability and sufficient scholarship, training, and experience to enable them to do satisfactory work. The average annual salary for public-school teachers, including teachers in the wealthy cities and in the high schools, is less than $500, about $3 a day for the actual number of days taught, and about $1.60 per day for the working days of the year. It should be remembered that teachers are expected to give their entire time either to the actual work in the schoolroom, to school work which must be done out of school hours, or to preparing them-

selves, in summer schools and elsewhere, for better service. Clearly there must be a large increase in the salaries of teachers before we may expect the efficient service which is desirable.

At last all of the States have normal schools of some kind for the professional training of teachers, but in the country at large less than one-half the teachers have had adequate preparation for their work. In some States less than 25 per cent of the teachers have had the full preparation given by the normal schools and in most of the States less than 10 per cent of the teachers in the country schools have had such preparation. If there is a reason why one teacher should have adequate training, that the time, money, and opportunity of the children of our schools may be well used, there is an equal reason why every teacher should be adequately trained, that the time, money, and opportunity of all children in all schools may be well used. A very large per cent of the teachers are young men and women under 21 years of age. Few continue to teach long enough to gain wisdom and skill from experience. In several States from 20 to 30 per cent of the teachers every year are beginners. In a few States the average length of service of teachers is less than 4 years of 6 months each.

Schoolhouses and equipment are still inadequate. The total value of all school property, including houses, grounds, and equipment, is less that $40 for each child of school age.

The country schools are particularly unsatisfactory. In many instances houses are cheap, insanitary, uncomfortable, and unattractive. The terms are short, the teachers poorly prepared, poorly paid, and overworked. In thousands of schools one teacher teaches from 20 to 30 classes a day, for many of which the class period is less than 10 minutes. Courses of study are ill-adapted to the interests of country children or the needs of country life. Attendance is irregular, and many children quit school forever before they have learned to read easily and readily ordinary English or to do the problems in arithmetic and concrete geometry arising in the daily life on the farm. Few learn enough of the history of their country and its institutions to fit them for intelligent citizenship, and fewer still have any adequate introduction to the great stores of literature or form the habit of reading good books so desirable in a country whose institutions are founded on the idea of the intelligence and self-directing power of the individual. Despite the investment of many millions of dollars in public libraries within the last few years, more than half the people of the country and nearly all the people living in small villages and rural communities are still without access to any large supply of well-selected books.

In mining districts and manufacturing towns and cities large numbers of children quit school and go into the mines and mills before

they reach the years of adolescence, when they can first begin to learn the most important facts and principles of citizenship and adult life, and before their physical strength and powers of endurance are sufficient to enable them to work at their tasks without permanent injury.

In the schools of city and country alike the great problem of moral education is yet to be solved. Knowledge is power. That this power may be used for the public welfare, it must be directed by a right understanding of human relations, by strong purpose, and good will. Right moral education must come to be understood as an essential part of the function of public and private schools alike.

Much remains to be done in higher education also. Of the four or five millions of young men and women of college age in the country, only about 200,000, or about 5 per cent, are doing college work in standard institutions. Less than 2 per cent do the full four years' work and take a degree. The best interests of the civic and industrial life of the country demand that a larger per cent of its citizens should have the preparation for leadership and direction of affairs which the colleges are supposed to give.

In 1910, 602 institutions conferring degrees reported to this bureau. Of this number, 550 reported their total receipts. The total receipts of 341 were less than $100,000; of 275 the total receipts were less than $50,000; of 91 the total receipts were less than $25,000; of 47 the total receipts were less than $10,000. Practically all of these were attempting to do four years of college work, and many of them, especially those having the smaller incomes, were attempting to do preparatory work in addition. The equipment of these institutions varies as widely as their income. Plainly, a degree conferred by one of these institutions does not mean and can not mean the same as that conferred by another. Much would be gained, I believe, for the country and for the institutions themselves if most of those having an income of less than $50,000 and all of those having incomes less than $25,000 would reorganize their work and not attempt to give the full four years of college work. It would be a great gain for them to become junior colleges, devoting all their energies to two or three years of work and sending their students for the last one or two years of their undergraduate work to those institutions having larger incomes and better equipment in laboratories, library, and faculty.

In the improvement of schools and other means of education the United States Bureau of Education should be an important factor. This bureau has no direct control over the schools or other educational agencies in any State, nor should it have. This control should, I think, remain forever in the States. The service of the bureau must be in other ways, and these ways are many. Every year the demands made upon it by State and city school officers, by teachers in schools

of all grades and kinds, and by other citizens interested in education become more numerous and more insistent. The opportunities for valuable service which either can not be rendered at all or can not be rendered as well by other agencies are almost unlimited, but most of these must be allowed to pass by because of lack of men and women in the bureau with the education, training, and experience necessary to equip them to do the kind of work needed, and for lack of sufficient appropriations to employ such men and women and to pay their necessary traveling expenses.

I think it not inappropriate to reproduce here that portion of the Annual Statement of the Commissioner of Education to the Secretary of the Interior for the year ended June 30, 1911, embodying the recommendations for the immediate extension and improvement of the work of the bureau. Many things not enumerated in these recommendations must be provided for before the bureau can begin to do in an effective way a large part of the work which properly belongs to it. These include the study of the education of abnormal and defective children—the deaf, the blind, feeble-minded children, children of criminal tendencies, the care and education of orphans—professional education, and the education of the more or less primitive races in the foreign possessions of the United States.

RECOMMENDATIONS FOR THE IMMEDIATE EXTENSION AND IMPROVEMENT OF THE WORK OF THE BUREAU OF EDUCATION.

[From the Annual Statement of the Commissioner of Education to the Secretary of the Interior.]

It is very important that all statistical reports of this bureau be issued within a short time after the date or period for which the information is collected, and these reports should be accurate and exhaustive for the subjects covered. Under the present plan of collecting statistics neither of these ends is attainable, since for all statistical data the bureau must, for promptness, accuracy, and thoroughness, depend alone on the good will and interest of many thousands of school officers of various grades in all parts of the country, without having authority to enforce compliance with any request of the commissioner, and without funds with which to remunerate anyone for filling the blanks of the schedules prepared and sent out by the bureau or for furnishing any other information. I am undertaking to arrange with the chief school officers of the several States a plan by which this bureau and the State departments of education may cooperate to secure promptly complete and reliable statistics in all educational agencies and activities, this bureau assisting State officers in the collection and preparation of material and receiving in return from them all or most of the data needed for its use. From all of these school officers with whom I have had an opportunity to confer I have assurance of the heartiest cooperation. If the plan proposed can be carried out, the State reports in most of the States as well as reports in this bureau will be much improved. If the appropriations asked for other purposes are made, it will be possible to so reorganize the present force of the bureau as to make it possible to carry out this plan of cooperation at a cost little greater than that of the present inadequate plan. To make it entirely effective, some additional legislation may be necessary in some States. This can be had, I think, within a reasonable time.

That the work of the bureau may be brought to the attention of teachers and school officers in the most effective way, and that the Commissioner of Education may have

first-hand knowledge of conditions and needs which will enable him to direct the work of the bureau most effectively, he should spend much of his time in the field, attending conventions of teachers, school officers, and others interested directly and indirectly in the problems of education, visiting and inspecting typical schools of all kinds and grades, and conferring with such people as can be helpful to the bureau in carrying on any part of its work. The commissioner should also, as far as possible, be relieved from the routine and details of office duty, to the end that he may have more time to plan and direct more effectively the larger work of the bureau. I therefore recommend that the position of assistant commissioner of education be created, and that sufficient traveling expenses be allowed for both the commissioner and the assistant commissioner. The assistant commissioner should be a specialist in secondary education and serve also as chief of a division of high-school education in the bureau.

The division of higher education in the bureau, with a specialist in higher education at its head, should be strengthened by the addition of a specialist in normal-school education and the training of teachers, a specialist in agricultural education to have general supervision of the expenditure of the large amount of money given annually by the Federal Government for the support of agricultural and mechanical colleges, and a specialist in agricultural education to give his time to the agricultural and mechanical colleges for negroes in the Southern States, helping them to a better use of the funds they receive from the Federal Government. The salary of the specialist in higher education should be so increased as to enable the bureau to retain the services of a competent man in that position. This division should have at least three additional clerks.

Much more than half the children in the United States live under rural conditions in small towns, villages, and open country. All their education must come through rural schools. The rural-school problem is admitted to be the most difficult of all school problems. This bureau has in the past been able to give very little direct help toward its solution. There should be in the bureau a comparatively large group of competent men and women giving their entire time and energies to this problem, with freedom, under the direction of the commissioner, to study it directly as well as indirectly wherever it can be studied to best advantage, to prepare bulletins on this subject for the general information of the people, and to go to any part of the country to give direct and specific assistance whenever needed.

Over all the world the demand for industrial, or vocational, education is growing. In our own country, teachers and laymen in urban and rural communities alike are demanding that the schools shall do something to prepare the masses of boys and girls for effective service in some industrial occupation, fit them to make a living, and to contribute their part to the commonwealth. How this shall be done and in what kind of schools no one seems to know certainly and fully. Experiments of many kinds are tried in many places. Much money is being spent for it and much more will be spent, more or less wisely. Commissions are sent abroad to study the efforts of other countries to solve this problem. Committees have been appointed by many societies in this country to investigate and report upon it. Education conventions devote their programs to it. A national society for the promotion of this kind of education has done much valuable work. There is great need in this bureau for a group of competent specialists and assistants to study the various phases of this problem; bring together and digest the work and reports of associations, committees, and commissions; help toward the formulation of some clearly understood fundamental principles; and assist State, county, and city boards and supervisors in working out their practical application, either in the ordinary schools, modified for this purpose, or in new kinds of schools, as may finally seem most wise.

Twenty million children and young people in the United States spend a good portion of their time in school every year. The indoor sedentary life required by the work

and discipline of the school is more or less unnatural for childhood and youth, and unless the conditions under which the school work is done are intelligently controlled, there is constant and grave danger that the health of the children may be injured, their vitality lowered, and their happiness and their value as citizens diminished throughout their lives. Modern science has brought to light many important principles of health, the means of the application of which should be known to all teachers and school officers. The Federal Government should give to the health of its children and future citizens not less care and attention than it gives to the health of the live stock of the country. To this end there should be in this bureau a specialist in school hygiene and sanitation, and he should have assistants and clerks to enable him to do this work effectively.

The growth of our cities has been very rapid, and the number of large cities in the country has become very great. In such cities a large proportion of the public revenues is spent on the schools. The demands on these schools are more numerous every year than they were the year before. The problems of city school administration therefore are ever more difficult and complex. With a competent specialist in city school administration and an efficient group of assistants and clerks, this bureau could render valuable and much-needed service to the cities. It should be enabled to do it.

The bureau now has one of the most complete collections of books, pamphlets, and reports on education in the world, and many thousands of bound volumes and pamphlets are added to it each year. This library should be made more serviceable, not only to the members of the bureau itself, but also to students in education throughout the country. To investigators in all phases of education it should become the chief source of information. All such students and investigators should come freely to this library, and the material in the library should be sent freely to them. In either case they should receive from the bureau effective help in their studies and investigations and wise guidance in the use of the material in the library. For this purpose and for the supervision of the preparation of many bulletins which the bureau has prepared from time to time by individuals and committees outside its own staff, there should be in the bureau a man well versed in the history, theory, and practice of education, who might give his entire time to this work. The bureau should also be able to carry on cooperative studies in secondary and elementary education under varying conditions in different parts of the country, securing for this purpose the services of expert teachers and supervisors. A small appropriation for this purpose could be made to bring very large results. The bureau needs also an assistant editor, a skilled librarian, and at least one additional translator. For the salaries of the specialists, assistants, and clerks required for the purposes here set forth and for expenses for travel and other purposes necessary to make their work effective I am submitting estimates for new appropriations, amounting to $140,420. I feel sure every dollar of this can be used by the bureau for the effective service of the country.

Respectfully submitted.

P. P. Claxton,
Commissioner.

The Secretary of the Interior.

CHAPTER I.

A BRIEF SURVEY OF EDUCATIONAL PROGRESS DURING THE DECADE 1900 TO 1910.

By Fletcher B. Dresslar,

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INTRODUCTORY STATEMENT.

The purpose of this survey is to set forth some of the more salient features of educational development in the United States during the first decade of the new century.

No one who has watched this growth will believe that it is possible to express it in any sort of completeness by statistical methods alone; but some of the more general and objective features can be handled in this manner, and by means of comparisons, general movements forward or backward may be seen. School statistics generally available, however, are faulty, and no amount of effort can correct them so long as the various States ask for returns on different and varying bases. Hence all general conclusions reached as a result of the study of the educational statistics of the country must be taken with due allowance unless supported by evidence from other sources. It may not be out of place at this point to say that this office is working with all diligence to get correct and comparable returns from all States and that a plan presented looking toward this end has been indorsed by the Department of Superintendence of the National Educational Association at the Mobile meeting in 1911. Within the coming decade it is expected that more reliable returns will be available and that they will be ready for publication in the year to which they relate. At any rate, this bureau is determined to make the attempt.

RELATIVE DECREASE IN SCHOOL POPULATION.

In 1900 the total population in the States was 75,602,515. In 1910 it had reached 91,972,266, or an increase of more than 21 per cent over that of 1900. But it is an interesting and quite significant fact that that part of our population represented by children between the ages of 5 and 18, or, in other words, the common-school population, had increased within the same 10 years less than 15 per cent. In the previous decade (that is, from 1890 to 1900) there was an increase of

the school population of more than 17 per cent, and from 1880 to 1890 the increase was more than 23 per cent. During these three decades, then, while the population as a whole has been increasing at a steady rate, the rate of increase in the school population has apparently dropped from more than 23 per cent to less than 15 per cent. These figures include the total school population, both white and black, but since the percentage of white children from 5 to 18 years of age has kept pace with that of colored children of the same ages for the same period, it is safe to assert that the above figures approximate the truth with reference to the steadily decreasing percentage of white children dependent on a given number of adults for educational support.

Mr. North, former Director of the Census, has said:

> The uninterrupted increase shown in the proportion of white adults of self-supporting age to white children proves exceedingly suggestive. At the First Census (1790) 780 adults contributed to the maintenance and rearing of 1,000 children in the United States, but in 1900 the relationship of adults to children had changed so greatly that the ratio became 1,580 adults to each 1,000 children. (A Century of Population. Growth, p. 104.)

While the above conclusions were made on the basis of the total number of white children from 1 to 16 years of age and of white adults over 20 years of age through a whole century, they certainly tend to corroborate the general conclusion mentioned, that, relatively speaking, the school population (5 to 18) is decreasing in a rather remarkable manner.

Aside from the general civic problems growing out of such a situation, it will be seen at once that many misconceptions concerning the expenditure per pupil for educational purposes could easily arise.

For example, it would now cost New England very little more per adult to give each of her children $20 worth of educational advantages than it would cost the South, per adult, all other conditions equal, to give her children $10 worth of schooling. While the middle, northern, and western divisions of States do not as a whole show either of these extremes to so striking a degree, there is, nevertheless, a good deal of variation. The real test, then, of the willingness of any State or section to do its duty in the educational support of its children may be measured more accurately by the cost per capita of adult population than by the expenditure per capita of the school population.

During the decade under consideration the percentage of the school population (5 to 18 years of age) enrolled in the public schools shows a slight decrease as compared with that of the previous decade. Whether this decrease is real or whether the statistics representing the last year of this decade are not exactly comparable with those of the first year of the decade it is impossible to say. But there seems to be some probability that the country as a whole has reached approx-

imately a sort of tableland in the heretofore up-grade movement in the percentage of enrollment of the public-school population. However, this general statement must be used with caution. In several of the Southern States, notably Mississippi, Louisiana, Florida, North Carolina, South Carolina, West Virginia, and Texas, advances have been made; while some of the Western States also show an increase.

AVERAGE DAILY ATTENDANCE.

It seems, however, that if the percentage of enrollment has not increased, or has even decreased, a better showing has been made in the average daily attendance. In 1900, the average daily attendance in the public schools was 10,632,772, which was 68.6 per cent of the enrollment; in 1909, the average daily attendance reached 12,684,837, being 72.5 per cent of the number enrolled. These figures, taken with the fact that they correspond rather closely to the progress of those representing the attendance for the several intervening years, seem to warrant the general conclusion that the children have attended the public schools more regularly during the past decade than in any previous one in our educational history. But there is still great room for improvement. There were in 1909, as shown by the statistical tables, 24,239,820 children 5 to 18 years of age; but only 12,684,837 were in actual attendance. That is to say, nearly one-half of the school population of 1909 was out of the public school each day during the year. This statement does not take into account the fact that most children have finished the elementary work several years earlier, and that many of them did not enter until 6 years of age, or even later. It is based on statistics gathered by this bureau to designate the school population, i. e., the number of children that might be in attendance at some school. By summarizing the two sets of figures involved, it is shown that, while the facts regarding the attendance are not what could be wished, there has been a slight, but steady increase in the percentage of average daily attendance during the decade.

INCREASE IN THE LENGTH OF SCHOOL TERM.

A still more significant fact, however, comes to light when the statistics relating to the length of the school term are examined. Taking the country as a whole, the length of the school term has increased from 144.3 days in 1900 to 155.3 days in 1909. The highest average in the history of the American school system was reached, therefore, in 1909, and all evidence at hand points to the continued increase of this average. This means that over one-half of a school month has been added to the average length of the school term, and in this particular alone educational effectiveness has been increased during the decade about 8 per cent.

AVERAGE NUMBER OF DAYS ATTENDED.

The average number of days attended by each pupil enrolled has increased in an unbroken and steady fashion from 99 days in 1900 to 112.6 days in 1909. While averages of this sort are more or less unconvincing and even at times misleading, in this particular they seem to be significant. On the basis of these figures, and on corroborative evidence, it can be asserted that during the past decade there has been a healthy growth in regularity of attendance, and that no previous year in the history of the common schools shows such a high mark in this regard as the year 1910. The significance of this statement will be understood most readily by teachers, and will, it is hoped, encourage some of them to renewed efforts to keep the children in school. Regular attendance means consistent and regular growth. A few irregulars seriously break the continuity of the whole work of the school. Just what elements have been instrumental in raising this average it is impossible to specify. Doubtless, medical inspection, compulsory-attendance laws, closer supervision, better adaptation of subject matter to the needs of the children, better housing, and many other factors have combined to bring about this result.

NUMBER OF PUBLIC-SCHOOL TEACHERS.

In 1900 the number of public-school teachers reached the total of 423,062, with approximately 30 men in each hundred teachers. In 1909 there were 506,040 teachers in public-school service, but the number of men had dropped to approximately 21 to the hundred.

This relative elimination of men teachers from the public schools has been going on steadily and rapidly since 1880. Much has been written about this part of recent educational history, and lamentation because of the possible dangers involved has been often heard. There is no doubt that it is unwise to intrust so important a matter as the teaching of boys and girls so largely to women; but the facts are known and have been for many years, and yet the hoped-for change does not come.

WAGES OF TEACHERS.

The average monthly wages of teachers can not be stated with accuracy because of the fact that the statistics gathered during the decade on this particular item are incomplete. But it can be stated with some assurance that the monthly salaries have increased for men in the neighborhood of 35 per cent, and for women about 25 per cent. The average monthly salary for men teachers was given in 1900 as $46.53; in 1909 it had increased to $63.39. The increase in wages for women teachers for the same period was from $38.93 per month to $50.08. It must not be forgotten, however, that while the

monthly salary has increased, the average length of the school term has also increased, and therefore the annual salary has increased to a much greater degree than the monthly salary alone would indicate. Doubtless one reason why the average salary of men has increased more rapidly than that of women lies in the fact that relatively a much greater number of the men have been engaged in supervisory work, and in this capacity command larger salaries.

NUMBER OF SCHOOLHOUSES.

Taking the decade as a whole the number of houses used for public-school purposes has increased from 248,279 in 1900 to 257,851 in 1909. It is interesting to note that during the last two or three years of this period there has been no appreciable increase. This is probably due to the movement for consolidation in country districts, to the recent period of financial depression, and to the continued increase in the urban population where larger buildings are being constructed.

VALUE OF SCHOOL PROPERTY.

The total value of all public-school property has increased from $550,531,217 in 1900 to the enormous sum of $967,775,587 in 1909. While it is impossible to specify in detail what particular items have been relatively most influential in this wonderful increase in our public-school equipment, it seems safe to say that by far the most important one is that of better and larger school buildings. This has been preeminently a period of advance in the style and quality of our school architecture. Not only are larger buildings built, but many of them are constructed of permanent materials and are equipped with modern conveniences, better furniture, more extensive libraries, and various new departments for the teaching of the sciences and their applications in the daily affairs of life. No one who is conversant with the educational history of the world will fail to see evidences of a movement which can not be matched from the records of the past. Greece and Rome in the days of their greatest advances knew naught of school buildings as they exist to-day. Far more money is invested in public-school property than was required to maintain all the machinery of our Federal Government in 1910.

But let us not boast of good works and forget those useless expenses of our so-called enlightened civilization. We spend each year for purposes which all reason and scientific investigation condemn as harmful enough money to duplicate all our school buildings and have millions of dollars left for providing worthy playgrounds for our children.

SOURCES OF PUBLIC-SCHOOL REVENUE.

Turning now to the sources whence the public schools derive their revenue, it will be seen by consulting the figures for the decade that the following statements represent approximately the facts:

The income from permanent funds and rents has increased from $9,152,274 in 1900 to $13,746,826 in 1909, though it appears from the figures for the years 1906–7 and 1907–8 that a much larger revenue was derived from these sources than at any period in our history. These figures as they stand are evidently for some reason not comparable with those for the other years of the decade, for there seem to be no adequate causes for such variations.

During the years under consideration the income from State taxes has grown steadily from $37,281,256 in 1900 to $63,247,354 in 1909. The increase has been regular and consistent. This is evidence of stable laws in this regard and of the increasing willingness of the States to meet their just obligations in matters of public education. But the most encouraging sign in the matter of school revenues is the striking growth in the amount of public-school funds derived from local taxation. In 1900 the total receipts from this source amounted to $149,486,845; but in 1909 the total had reached the sum of $288,642,500, an increase of over 90 per cent. This is the most significant fact in the financial statistics for the period. It means that education is largely and directly in the hands of the people and that they are meeting the financial demands loyally. Those States which still persist in preventing the people from exercising the right to local taxation for school purposes are surely out of line with the democratic faith so strikingly shown by these figures. Whatever qualms may arise at times on account of civic inefficiency in other lines of endeavor, it is plain that the American people believe in the education of their children and are willing to pay for it directly, out of their own pockets. It ought to be noted in this connection, too, that there is a growing tendency in the States to enact laws "requiring more careful auditing of accounts and a greater publicity of the local financial affairs of the public schools." (Details regarding this point can be found in Bulletin No. 7, 1908, prepared for this bureau by Prof. E. C. Elliott.)

The total income from all sources for the common schools has increased from $219,765,989 in 1900 to $403,647,289 in 1909. This is truly a remarkable showing. During this time the population has increased only about 20 per cent and the school population in the neighborhood of 15 per cent, while the total income for common schools has increased more than 83 per cent. As indicated above, the large item in this increase is the income from local taxation. This fact adds great significance to these figures; for not only does it emphasize, as already indicated, the willingness of the people to support their common schools in an immediate and direct way, but it

should furnish a striking object lesson to those States which are yet afraid, apparently, to trust the people with power to tax themselves for the adequate support of their common schools.

COST OF PUBLIC SCHOOLS.

The expense account of our public schools shows an increase from $214,964,618 in 1900 to $401,397,747 in 1909, or about 86 per cent. But since, as was shown earlier in this chapter, the population as a whole is growing more rapidly than the school population, it has cost relatively a smaller increase per capita of the total population to meet this increasing expenditure. It cost $2.84 per capita of population to meet the school expenditures in 1900 and $4.45 in 1909, or an increase of only about 56 per cent, to meet an increase in total expenditure of 86 per cent. We have a right, therefore, to expect better educational care of our children at a relatively slower increase in cost per capita of population. The number of children of school age per 1,000 of the population is rapidly and steadily declining and the increasing cost per capita of population for their schooling should result in better educational advantages for each child than in any previous decade. The total expenditure per pupil for common-school purposes in 1900 was $20.21. In 1909 it had increased to $31.65, or at the rate of 56 per cent. This increased cost per pupil has resulted largely from the relatively larger expenditures made for buildings, sites, furniture, libraries, and general school equipment. There has been a steady falling off in the percentage of the total common-school income devoted to salaries for the teachers. In 1900 64 per cent of the total expenditure was devoted to salaries; in 1909 this had decreased to 59.2 per cent, and it declined steadily through the intervening years. While it is to be hoped that in the next decade this upward trend in better equipment will be continued, good buildings and good equipment generally can not take the place of better teachers.

PROGRESS IN KINDERGARTENS.

In 1900 there were approximately 250 cities of a population of 4,000 or over in which public kindergartens were maintained in direct connection with the city systems of schools. There were employed in these cities 3,326 kindergarten teachers, and the total enrollment of kindergarten pupils was 131,657. In 1909, the latest date for which statistics are available, there were about 400 cities with a population of 4,000 or over which maintained kindergartens. For this work 5,887 teachers were employed, and 185,471 children were enrolled. By a study of the details upon which these figures are based, it appears that many of the smaller cities which did not include kindergarten work in 1900 have, during the decade, made

some provision for it, and that many larger cities have extended the work. Comparatively speaking, there are few cities in the South that include the kindergarten as a part of their school systems, but there has been a decided growth in this direction. The States of the North are the most progressive in this regard. In Michigan, for example, there are 35 cities with public kindergartens. Naturally, the cosmopolitan cities show the greatest increase.

It has been said that while the philosophy upon which the kindergarten was founded is German, the development of this form of school work has come to be peculiarly American. To this may be added the fact that the American kindergartner is rarely able to understand the more or less mystic philosophy of Frœbel, and has therefore shaped her work to suit the practical life of the American people. It is to be hoped that this tendency will not carry too far and rob the work of that splendid element of idealism which should be the heart and soul of all kindergarten training. To meet more successfully the demands implied in the name, the work must not be allowed to degenerate into another form of indoor teacher-directed activity.

CITY SCHOOL ORGANIZATION AND ADMINISTRATION.

Progress in city school organization and administration for the decade is expressed in many lines of development. The regular school work has been enlarged so as to include more manual and vocational training for the boys, and larger opportunities for domestic science for the girls. Commercial courses and courses in stenography and typewriting have multiplied in the high schools, and increased emphasis has been put upon the application of school work in its relation to the daily life of the citizen. Decided progress has been made in school buildings, and especially in the demand for larger playgrounds, social recreation centers, school baths, medical inspection, care of defectives, and better sanitation in general. Classes have been organized for exceptional children, and continuation and evening schools increased in number.

The city school boards are composed of fewer members, and their work has been outlined under fewer committees. Instead of appointing or electing members of city boards from wards, they are now more frequently appointed or elected as representatives of the city at large. This change deserves the highest commendation both as a means of ridding the schools of the baneful influence of ward politics and as a unifying agency in school supervision.

PROGRESS IN HIGH SCHOOLS.

The development of public high schools during this period constitutes one of the remarkable features of educational progress in the first years of the new century. This development expresses itself

not only in numbers, but in the quality and quantity of the work done. The high schools are more effectively reaching all classes and adapting their work to meet the needs of the masses in a very significant and vital fashion. Meanwhile the courses offered to meet college requirements have not been seriously disturbed, and at the same time a more vital affiliation between the colleges and high schools has been fostered.

In 1900 there were approximately 6,005 public high schools in the United States. In 1910 there were 10,213, or an increase of a little over 70 per cent in the 10 years. The number of teachers employed in public secondary schools in 1900 was 20,372. In 1910 there were 41,667 teachers in public high schools, or an increase of more than 100 per cent in the decade. The number of pupils attending public high schools in 1900 was approximately 519,251, but by 1910 the number had increased to 915,061, or more than 76 per cent. When we institute a comparison between the public and private high schools in these regards we find that the number of private secondary schools has decreased during the decade and that the number of teachers has increased only about 10 per cent. The number of students in private high schools has increased only about 7 per cent.

Within the 10 years the ratio between the numbers of boys and girls in public high schools has changed very little, but there has been a slight increase in the percentage of boys. In 1900 of all the students in public secondary schools, approximately 41 per cent were boys and 59 per cent were girls; in 1910 in every 100 students 43 were boys. The proportion of high school students preparing for college has apparently decreased in the decade from about 10.8 to approximately 5.5 per cent. This does not mean that fewer students enter college from high schools, but that there has been a great increase in the number of students who are making the high schools their finishing schools. The percentage of graduates has changed very little for 20 years. The graduates are approximately 12 per cent of the enrollment each year, and about a third of these are prepared for college. The emphasis upon the various subjects of study is indicated by the following table:

Number of students, in each 1,000 enrolled in public high schools, studying the various subjects offered.

Subjects.	1900	1910	Subjects.	1900	1910
Latin	499	495	Geology	39	14
Greek	36	13	Physiology	263	158
French	107	117	Zoology	.....	78
German	160	236	Agriculture	.....	163
Algebra	557	569	Domestic economy	.....	41
Geometry	273	308	Psychology	30	13
Trigonometry	25	22	Rhetoric	397	566
Astronomy	29	9	English literature	439	570
Physics	182	148	General history	384	556
Chemistry	79	71	Civil government	206	160
Physical geography	224	191			

By comparing these two columns one can see that Latin is holding its ground; Greek is disappearing; French and German are gaining—German more than French; algebra occupies a large share of the time and is steady; geometry is gaining; trigonometry is rarely taken, but has not changed; all the older sciences, rather strangely, are relatively falling off; English and history have gained materially. The subjects of zoology, botany, agriculture, stenography and typewriting, and domestic economy have appeared in the list of studies in recent years, but no comparisons for the decade are possible.

GROWTH OF NORMAL SCHOOLS.

There has been marked progress in the work of the public normal schools within the decade. In 1900 appropriation of public funds to the amount of $2,769,003 was made for the support of normal schools. In 1910 the appropriations for this purpose amounted to $6,630,357. Meanwhile, during the last three years of this decade, more money had been spent for buildings than during the whole period from 1890 to 1900. In the year 1900 there were 1,068 men and 1,847 women employed as normal-school teachers in the various States. In 1910 there were 1,692 men and 3,122 women so employed. While it is impossible to exhibit the facts in statistical form, it is true that the teaching force of public normal schools has largely increased in efficiency. Specialists who have been trained in universities and colleges have taken the places of those who had gone little or no further than they were expected to take their students. Laboratories for the study of the sciences have been multiplied and a higher grade of scholarship has been demanded of both teacher and students.

In 1900, out of a total number of 47,421 students in the professional courses of public normal schools, 12,432, or a little over 26 per cent, were males. In 1910 in corresponding courses, there were 79,546 students; 17,096, or a little over 21 per cent of them, were males. These figures foretell a still further reduction in the relative number of men teachers for the public schools.

There is a rapidly growing conviction that the entrance requirements for the normal school should not be lower than that for college; or in other words that the completion of a four-year high-school course should be the minimum requirement. Several States have such requirements, and it is to be hoped that all will come to this as soon as practicable. This would permit the normal schools to devote their time mainly to the professional side, and save the States the expense now made necessary by duplicating the work of the secondary schools. The conditions in some parts of the country, however, do not yet warrant this change, but the time is rapidly approaching when this requirement ought to prevail in every State.

During the last years of the period under consideration, there seems to have been an unmistakable tendency for the stronger high schools to include in their work certain courses designed to prepare students to teach in the common schools. Kansas has inaugurated this movement in a large majority of her better high schools, and Arkansas, Iowa, and other States are doing the same thing. Such courses are not designed to take the place of normal-school courses, but rather to help in some measure, by giving to those who would otherwise enter upon the work of teaching without any professional preparation some insight into the purposes and methods of the common schools, especially the rural schools. The plan is still on trial, and in order to succeed it will need wise guidance and careful limitations.

GENERAL AGENCIES FOR THE IMPROVEMENT OF TEACHERS.

The various agencies at work for the improvement of teachers already in service have increased in effectiveness during the decade and promise even better results in the near future. Teachers' institutes, reading circles, State and local summer schools, school-improvement work, etc., are gradually becoming more effective, are reaching a greater number of the teachers and the more progressive communities as a whole. In a bulletin published by this bureau this phase of educational work is treated exhaustively.[1]

HIGHER EDUCATION.

In the realm of higher education the decade just closed has been marked rather by reorganization and the development of the spirit of wider service than by the founding of great institutions. Vast expansion of function, both upward and outward; notable elevation of standards, especially of graduate and professional education, accompanied by thoroughgoing investigation and discussion of the subjects and methods of instruction; distinct improvement in business organization and administration in both public and private institutions; unprecedented drafting of university experts into State and Federal service; and unparalleled increases in registration, endowment, and income are all features of the progress of the past 10 years. The increase in revenues from taxation in the case of tax-supported institutions has greatly outstripped the increased incomes of endowed private institutions. The following figures will illustrate various phases of this noteworthy development from 1900 to 1910: The attendance of collegiate and resident graduate students in the universities, colleges, and schools of technology for men, for both sexes, and for women, rose from 109,929 to 183,583; the num-

[1] Agencies for the Improvement of Teachers in Service, by William Carl Ruediger.

ber of professors and instructors from 16,921 to 27,279; productive funds from $166,193,529 to $273,423,328; and income, exclusive of additions to endowment, from $28,558,463 to $77,873,367. At the close of the decade 177 colleges and universities were maintaining departments of education designed not only to train teachers for secondary schools but also to develop a general interest in the larger questions of public education.

PROGRESS IN THE TEACHING OF AGRICULTURE.

In 10 years the number of students in the agricultural and mechanical colleges, in the regular four-year courses in agriculture, has increased more than threefold. These colleges have established extension work in agriculture and are reaching farmers throughout the States by every form of extension teaching: Educational trains, farmers' institutes, lecture courses, short courses at the colleges and at other centers, correspondence courses, summer schools, traveling expert advisers, farm demonstration work, etc. Many are offering four-year, two-year, and one-year courses for teachers in agriculture. Several colleges other than those in the list of "land-grant" institutions are introducing agricultural courses.

Agriculture has been permanently introduced into the curricula of very many public schools. There are about 100 agricultural secondary schools supported in whole or in part by the States in which they are located—district schools of Georgia, State schools of New York, county schools of Wisconsin, etc. About 2,000 public high schools give instruction in agriculture as a separate subject in more or less complete courses. Courses in agriculture are given in 106 State normal schools.

Agriculture is a required subject in all common schools of 12 States; in the rural schools of 5, and in the rural high schools of 3. It is required for teachers' certificates in 16, and is optional in 3. Special agricultural schools receiving State aid are established in 16 States, and are authorized in North Dakota. State aid to departments of agriculture in high schools is given in 12 States. Secondary schools of agriculture or secondary courses in agriculture, in addition to the collegiate courses, are maintained by the State agricultural colleges of 31 States. Summer schools giving elementary agriculture for teachers are conducted by 34 of these institutions, and short courses for farmers of from 2 to 12 weeks are maintained by the majority of them. In another part of this volume can be found detailed information bearing on recent progress in agricultural education.

FORESTRY SCHOOLS.

There were no schools of forestry 10 years ago, although brief courses were given in a few of the agricultural and mechanical col-

leges before the Yale Forest School was established in 1900. Now there are 5 graduate schools giving the master's degree, 18 colleges giving four-year courses leading to the bachelor's degree, and at least 25 giving shorter courses from one-half to one year under the general courses in botany or horticulture. There are, also, two professional schools of forestry, which require no preliminary college training, and a few secondary schools offering work in forestry.

EDUCATIONAL DEVELOPMENT IN THE SOUTHERN STATES.

In the Southern States the average length of the school term has increased from approximately 5 months to over 6 months, and the average number of days of schooling given for every child from 5 to 18 years of age has increased from 45 to 56 days.

The public high schools for white children in the Southern States have increased in numbers in a very encouraging manner. In 1900 there were, as shown by the figures furnished this office, 1,032 public high schools for white children; by 1910 this number had increased to 2,194, or more than 100 per cent. The number of teachers employed for these schools had increased from 2,648 to 6,482, or more than 144 per cent. The number of students in 1900 amounted to 62,289; in 1910 there were 137,469, a growth of 120 per cent.

This rapid development of the secondary schools in the South promises great good to the people of that section of the country. Heretofore many boys and girls were denied the privilege of high-school training for their life's work because of their inability to meet the expense connected with such training in private schools or in public high schools in the larger cities. This condition is rapidly giving way, and in a few years no ambitious boy or girl in this section will be thus handicapped. Moreover, the high schools that are springing up in all parts of the South are in the main wisely adjusted to the conditions of the South, both as college preparatory schools and as preparatory to life's demands. It is especially noteworthy to find a wholesome classical and literary spirit being developed in conjunction with training in agriculture and for scientific pursuits.

One of the serious difficulties the South is now called to face is to secure a sufficient number of virile men well prepared to conduct the high schools and to become safe leaders in this educational renaissance. Until recent times, law, medicine, and the ministry have absorbed the most promising men. By reason of the peculiar conditions and the prestige of these professions in the South, it will require a great deal of work and higher standards of teaching and better salaries to turn a sufficient number of good men toward educational work. As it is now, it is more difficult to find well-prepared men to manage and lead educational affairs in the South than it is in the North.

In 1900 the estimated number of white children from 5 to 18 years of age in the Southern States was 5,892,392. The number had increased to 6,566,184 in 1909, or over 11 per cent. The total enrollment in the common schools for white children had increased from 4,261,309 to 4,909,283, a gain of over 15 per cent. The average daily attendance had increased from a total of 2,775,059 to 3,257,185, or above 17 per cent. The number of teachers in 1900 was 98,710, and in 1909 it was 122,941, a gain of more than 24 per cent.

One of the peculiar features of public education in the South lies in the fact that local taxation for school purposes is limited. In several of these States in 1900 the amount raised by local taxation was but little over half as much as that appropriated by the States directly. The money appropriated by 11 Southern States for public schools in 1900 amounted to $14,843,787. For the same year the total amount raised by local taxation in these States was $20,616,445. Ohio alone in 1900 raised $20,825,730 by local taxation, while from her State funds were appropriated only $2,100,794. This centralized form of school control and school maintenance in the South is gradually giving way to a more democratic local form of school management. Commenting on this fact of centralization in school matters, Mr. R. H. Powell, jr., the Rural School Supervisor for Georgia, has said: "There is a tendency to look to the State to do all for education—a dangerously undemocratic tendency toward centralization of government and destruction of local self-reliance."

WORK OF THE SOUTHERN EDUCATION BOARD.

The Southern Education Board, formally organized in New York City November 3, 1901, was a direct outgrowth of conferences which had been held first at Capron Springs, W. Va., and later at Winston Salem, N. C. It is not incorporated. Its officers at present are: Chairman, Robert C. Ogden, New York City; treasurer, George Foster Peabody, New York City; executive secretary, Wickliffe Rose, Washington, D. C.

The purposes set forth at its organization and so successfully carried out during the decade, are as follows:

1. To conduct a campaign of education for free schools for all the people, by supplying literature to the newspapers and periodical press, by participating in educational meetings, and by general correspondence.

2. To conduct a bureau of information and advice on legislation and school organization.

3. For these purposes this board is authorized to raise funds and disburse them, to employ a secretary or agent, and to do whatever may be necessary to carry out effectively these measures, and others that may from time to time be found feasible and desirable.

The value of the service this board has rendered is inestimable; its influence has been felt in the remotest corners of 11 Southern States. Systematic campaigns have been undertaken in all these States, and the doctrines and needs of public education preached to the common people, as well as to those who have had better advantages.

In Mr. G. S. Dickerman's "Review of Five Years of Educational Progress in the South," published by the Southern Education Board October, 1907, accounts of some of these campaigns are given, and they should be read by all who would appreciate the work of this board, as well as by those who are seeking to understand the causes of the great educational awakening of the South. In a very decided way the Southern Education Board has understood the needs of the South and has helped where help was needed, and has encouraged in the most practical manner.

VOCATIONAL TRAINING.

Since the close of the past century the ideals, purposes, and courses of study for the public schools have been examined with a thoroughness and discussed with an earnestness commendable in the highest degree. As a result there has come about a general demand that more time should be given to training in English, nature study, manual training, and, especially in the last years of the decade, to vocational training. For the boys this has usually taken the form of work in wood and iron. Girls have had much variety of work, often disconnected and unorganized. From manual training more or less like that given to the boys, they have in recent years been turned toward those lines of work that every housekeeper ought to know and be able to do, such as cooking, sewing, caring for infants, and supervising intelligently the outlay for food and clothing for the family. This latter movement promises more definite results, and offers far more opportunities for real usefulness as well as culture than much that was given earlier in the name of manual training. One can foretell without appreciable error what, in the main, the life work of 90 per cent of the women of the next generation will be. Hence it ought to be comparatively easy to work out a course of study for girls which will result in definite training for that which is really and surely coming. The children of the future will learn their mothers' language, absorb their mothers' culture, and be largely subject to their mothers' guidance. The future mother will have to spend much time and thought on clothing, cooking, washing, and the general care of her children, just as mothers do to-day. There will be houses to build and furnish; houses to clean and keep clean; mending to do; health conditions to consider; plans for entertaining friends; and, perhaps more than now, definite and thoughtful consideration of how to make life worth while on a meager and some-

times irregular income. Surely thoughtful women teachers ought to be able to see in this newer phase of training for girls a great opportunity for real culture, as well as specific preparation for housekeeping. Meanwhile the work is still chaotic, and needs adjustment and revision.

The old form of manual training for boys has doubtless served useful purposes, but for the most part it has been too indefinite and theoretical. The highly elaborated and logical system of sloyd has not taken hold of boy nature in a vital way, because it is based too exclusively on mere drill work, and too rarely produces a product worth the endeavor. In some way boys must be allowed to undertake real problems if a real lively interest in manual work is desired. It is far more educational for a boy to undertake to make a chair and get an imperfect product than it is to simply practice sawing, planing, carving, cutting, and boring.

The future occupations of boys can not be foretold with the same degree of certainty as those for girls. The variety of opportunities, duties, and responsibilities for the men of coming generations is bound to be even greater than to-day; but specific training in some useful and fundamental present-day occupation will not only help him to find himself, but, when properly taught, will give him an insight into social and industrial progress of vital importance to every citizen. He will then learn to do something, and at the same time get some vision into the intricacies of human society. The civilization or culture of any nation is reflected in its trades and industries. Tools, machines, and manufactured products of all sorts represent the epitomized struggles of humanity.

The chief difficulty in vocational training in the schools lies in the fact that the variety of work which can be undertaken is limited. The only practical escape at this time seems to be through some method of cooperation between schools and homes, shops, farms, and general business interests. In the future, perhaps, the word "school" will connote the organized efforts of the whole community to furnish to the children opportunities to learn as well as to do. At any rate, there is at present an unmistakable drift in that direction.

Vocational training implies the acquirement of skill, and in addition ought to mean progressive growth in the valuation of labor. The future citizen will have to live in a complex civilization, where cooperation and interdependence will prevail even to a greater degree than at present.

In recent years a great deal of criticism has been heaped upon the schools for their alleged lack of a practical sort of education. Much of this criticism has been just; but the most practical thing in life is not money getting nor even skill in a trade. The American people need to be reminded frequently that along with this educative, practical contact with the ordinary duties of life, there is also need

for that inspiration and culture which come from an intimate knowledge of the ideals, aspirations, and wisdom of the human spirit at its best. We need especially to see and understand that unless these common duties of life, be they ever so necessary, are utilized and made subservient to the real purposes of life, we shall eventually miss the mark. It is to be hoped, therefore, that, together with this most commendable attempt to teach boys and girls the dignity of labor, and train them to do skillfully some of the important duties of life, teachers will rise to that higher point of view which will enable them to utilize this work for insight, wisdom, and virtue.

COMPULSORY ATTENDANCE LAWS.

During this decade perhaps no topic in school legislation has had more thoughtful consideration than that of compulsory school attendance. Prior to 1900 more than 30 States had laws relating to compulsory attendance, but many of these laws were ineffective, and most of them were not sufficiently throughgoing in their requirements to meet the demands satisfactorily. In general, then, it can be said that while comparatively few States had not undertaken the work in 1900, most of them had yet to learn what they really needed in the way of legislation and to make clear the exact purpose and principles underlying compulsory attendance laws. During these years, then, the progress that has been made is that of development rather than initiation. Comparatively few backward steps have been taken, and decided advances have been made in many States in the matter of lengthening the required annual attendance, and especially in requiring specific educational attainments regardless of the time element. The age limits formerly set have been extended, and the laws have been made more strict with reference to the classes of children coming under their provisions. In the beginning of this movement, many compulsory attendance laws were almost useless, because they did not provide a practicable means for their enforcement. In recent years these weaknesses have been largely eliminated, and in most States compulsory attendance laws are now worthy of the name.

Back of all the details, however, one can see clearly the temper and the more or less unconscious educational philosophy of the people. They believe not only that every child has the right to opportunity, but they believe more specifically than ever before, that the State has a definite right to protect itself from the dangers of ignorance.

The progress of legislation on child labor has had a vital bearing on compulsory attendance laws. Practically no legislation has been enacted with reference to the regulation of child labor which has not had, directly or indirectly, some relation to schooling. To cite two illustrations: Georgia enacted in 1908 a law regulating the employ-

ment of children in factories and manufacturing establishments, in which the following provisions are found: "No child under 14 years of age shall be employed, unless he or she can write his or her name and simple sentences, and shall have attended school for 12 weeks of the preceding year, 6 weeks of which school attendance shall be consecutive;" Idaho in 1907 enacted that "No minor who is under 16 years of age shall be employed or permitted to work at any gainful occupation during the hours that the public schools of the district in which he resides are in session, unless he can read at sight and write legibly simple sentences in the English language, and has received instruction in spelling, English grammar, and geography, and is familiar with the fundamental operations of arithmetic up to and including fractions, or has similar attainments in another language."

Compulsory attendance upon schools was required in 1910 in all States in the North. The only States, in fact, which did not have compulsory laws were Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and Texas.

PENSIONS FOR TEACHERS.

In 1900 no teacher in the common schools of any State was pensioned from public school funds. In 1910 Rhode Island and Maryland had laws providing pensions, to be paid under given conditions wholly from State funds. In New York teachers in State institutions are granted pensions, and the laws of New Jersey require local authorities to pension teachers who have served 35 years. The Legislature of Massachusetts has enacted a law requiring the Boston school committee to levy a tax for a pension fund, and also another allowing all cities and towns other than Boston to provide pension funds if, in duly appointed elections, the people in these cities and towns so decide. Other States have enacted laws requiring all the teachers in cities of a given population to pay a certain per cent of their salary into a pension fund. Further details of the most recent legislation on the matter of pensions can be found in another part of this report. It is enough to say in this connection that decided progress has been made in the past 10 years in legislation touching the matter of teachers' pensions, and that the time has come when public funds are used for this purpose.

CONTINUATION SCHOOLS.

The movement for so-called continuation schools in this country has made rapid progress in the past 10 years, although no definite standardization has yet been attained; probably that is undesirable at this time. The term "continuation school" has come to desig-

nate "any type of school which offers to people while they are at work opportunity for further education and training." Naturally, for the most part, they are evening schools, largely composed of young men and young women who have discovered the need of some general or special training in order to make more satisfactory progress in their daily employment. For a careful and extended discussion of the continuation schools the reader is referred to Bulletin No. 1, 1907, prepared for this bureau by Mr. Arthur J. Jones.

Within the past decade the leading railroad corporations of this country have organized and developed a new set of vocational schools. True, a beginning had been made before 1900, but the schools as they now exist are almost wholly the product of this decade. In a bulletin (No. 10, 1909) published by this bureau, Mr. J. Shirley Eaton has gone into the matter at length. He also calls attention to the various apprenticeship systems used, and to a new sort of cooperative educational work between the railroads and various high schools and colleges throughout the country. The movement as a whole is a most interesting one and is bringing to light some striking educational experiments.

LACK OF PROGRESS IN MUSICAL EDUCATION.

It is a matter of regret that there is no general forward movement in music education to record. Doubtless some advances here and there have been made, but as far as can be seen there is no clearly marked and definite call from the hearts of the people that their children shall be trained in music, or even trained to appreciate it. The American people are eye-minded, and moving pictures seem to suit their desires better than music. In some way the people should be taught to hear the significant things of life, as well as to see them.

CARE OF DEFECTIVE CHILDREN.

Progress in the educational care of defectives and delinquents is clearly shown by the amount of recent State legislation relating thereto, and by the special provisions made in many city systems for the better care of these unfortunates. In a very definite way these special provisions express the deep humanitarian tendencies of the times. The doctrine which lies back of this faith might be set forth in some such phrase as this: All defectives and delinquents who can profit by education deserve at public expense that special training which will enable them to get more out of life, and to contribute to it all that their capabilities will permit.

MEDICAL INSPECTION OF SCHOOLS.

Medical inspection of schools did not begin in this country in any specific and thoroughgoing way until 1894, and in 1900 there were

comparatively few cities or States undertaking such work. In 1910, according to returns published by the Russell Sage Foundation, department of child hygiene, there were 400 cities with systems of medical inspection. As late as 1905 there were but 55 cities wherein medical inspection was regularly undertaken. From these figures it can be seen at a glance that this phase of public-school work has developed with great rapidity. This rapid advancement has been made possible partly by the fact that European countries preceded us by many years in this work and we have been able to profit by their experiments and by the systems they evolved. Nevertheless many adjustments have been made, and doubtless many changes will yet be made before any one plan will serve as a standard. Originally the work was undertaken mainly as a means of preventing and controlling contagious diseases and for the discovery and better care of children with defective vision or hearing. It now includes in its purview almost all matters pertaining to the physical welfare of child life while in school, and has in many places been extended so as to take cognizance of home conditions as they affect the health of the children. The "school nurse," dental hygiene, general physical examination of teachers and pupils, and all that pertains to the hygiene of instruction and the care of school premises, are now recognized parts of this new and highly useful branch of school work. In addition, the medical men in this department of the public-school service are influencing in many ways the teaching of general hygiene in the school curriculum.

Sound health is vital to any community as well as to the nation, and our people have not been slow to recognize the great value of this service. Every good citizen who studies the movement will rejoice in the great progress made, and will hope for and confidently expect a wider and fuller development in the immediate future. The urgent need now is to extend it so as to include the country children in its scope.

PROGRESS IN SANITATION.

During the decade there has been marked improvement in the demand of the more informed classes for better sanitation in the cities and towns, and, to some extent, in the country. There is a general disposition now developing to connect good citizenship with cleanliness and sanitation. This movement toward better health conditions is manifested in the adjustment, to this end, of the courses offered in high schools and colleges in biology, chemistry, and hygiene. The general subject of school hygiene and sanitation is demanding more attention, and the work in physiology in the elementary schools is including more information and training in matters pertaining to personal and community health. This comparatively new emphasis on sanitation has grown directly out of the wonderful

advances that have been made in the last quarter of a century in bacteriology and medical science. In the schools these new points of view are expressing themselves in the demand for larger playgrounds, better methods of heating and ventilation, the disuse of the common drinking cup, medical inspection, dental hygiene, and many other matters relating to the health of school children. Practically all the States have passed laws on these and kindred subjects, and the outlook for the immediate future is encouraging.

What might be called a national crusade against the house fly and the mosquito has grown out of the results of investigations connecting these pests with the spread of typhoid fever and malaria. The newspapers of the country have done helpful service in aiding in this movement, for they have used their columns freely to create a widespread public sentiment in favor of better rural and municipal sanitation. The Rockefeller Sanitary Commission for the Eradication of Hookworm Disease came into existence during the decade, and it is now engaged in teaching the people the necessary sanitary measures for preventing this disease as well as the proper therapeutic measures for those who are already infected.

In 1907 Mrs. Russell Sage gave the sum of $10,000,000 to a board of trustees who are to use the income to "eradicate so far as possible the causes of poverty and ignorance." The department of child hygiene of this foundation has shown unusual energy and has published many bulletins and books bearing on vital questions of health and sanitation. As a result, the quickening interest in playgrounds, open-air schools, and medical inspection has been fostered and the results of many valuable investigations have been published.

This general awakening for better sanitation is not limited to our country, but it is clearly a world movement, and will ultimately issue in relieving humanity from much suffering, poverty, and vice. An education which does not teach children, as well as adults, the real significance of good health, and some of the most fundamental laws of personal and community hygiene, is faulty and meretricious.

EDUCATION OF NEGROES.

Before calling attention to the figures relating to the education of the negroes, it is only fair to say that the statistical material on negro education, which the bureau has been able to secure, is far from complete and therefore not accurate. There are many opportunities and occasions for errors in the returns furnished to the various State superintendents, and there are no common standards among the States for gathering and classifying the returns. However, it appears from the figures furnished that in 1900 there were in average attendance in the public elementary schools of 16 Southern States and the District of Columbia 957,160 negro children. For

their instruction, 27,182 teachers were employed. In 1910 there were 1,116,811 in average daily attendance, with a corps of 30,334 teachers. This is an increase of a little over 16 per cent in the number in attendance, and slightly over 11 per cent in the number of teachers employed.

In the 92 public high schools for negroes in 1900 there were 5,232 students who were classified as pursuing secondary subjects. The corresponding figures for the 141 high schools in 1910 show 8,251 students of high-school grade, an increase of over 57 per cent. The total number of teachers for these schools had increased from 272 in 1900 to 473 in 1910, or more than 73 per cent.

In addition to the students who are classified as doing regular high-school work, there were in these so-called high schools, in 1900, pupils classified as elementary students to the number of 3,216; in 1910 the number of this same grade of students was only 2,684. This decrease in the amount of elementary work done in high schools suggests that at present the public high schools for negroes are of a higher grade than were those at the beginning of the century.

The increased expenditure for public secondary education for negroes can not be accurately estimated because of the fact that the expense accounts for those doing real high-school work and those who have actually been doing elementary work have not been kept separate. In addition, several States have been unable to furnish the returns desired.

In general, there has been marked progress in public high schools for negroes, especially in Texas, Missouri, Georgia, Mississippi, and Florida. In 1910 Texas reported 36 high schools for the negroes; Missouri, 21; Georgia, 11; Mississippi, 8.

Up to this time, however, the major part of the higher training for negroes has been given in private academies, institutes, and colleges, and these are of all grades of worth. In 1900, according to returns furnished this bureau, there were 145 such schools. In 1910, 189 were reported. Nearly all of them have elementary, secondary, and collegiate work, and are supported and directed very largely by religious denominations and charitable organizations.

In these private schools in 1900 there were enrolled a total of 37,696 students; of these 20,348 were females and 17,348 were males. More than half of the students were in the elementary grades. The total number reported as doing secondary work was 13,267. The total number of teachers employed was 1,826. For the year 1910, in 189 schools of the same general type, 57,915 students were enrolled; 25,730 males, 32,185 females. Of these, 19,654 were listed as students of secondary grade. The total number of teachers employed was 2,941. These figures show an increase in secondary students in private schools during the 10 years of a little over

48 per cent, and in the whole number enrolled, regardless of their classification, as above 53 per cent.

This comparison brings to light two facts: (*a*) The number of the negroes receiving secondary and higher training in private schools is much larger than that in public schools; (*b*) relatively speaking, the percentage of growth for public high schools for negroes for the decade appears to be slightly in excess of that for private schools maintained for the same purpose.

In an elaborate and very interesting volume entitled "An Era of Progress and Promise," edited by Mr. W. N. Hartshorn, and published by the Priscilla Publishing Co., Boston, 1910, there is the most specific account heretofore published of the *Religious, Moral, and Educational Development of the American Negro since His Emancipation* (1863–1910).

From lists of 259 private educational institutions for negroes, printed in this volume, the following facts have been gleaned: In 1908 the total number of students in these institutions was 76,169. These schools are operated and controlled by various religious denominations, societies, and independent boards. During the decade from 1900 to 1910, the number of schools as listed increased from 218 to 259. In detailed statements concerning 120 of these schools under control of churches, it is learned that the total number of students for 1908 was 41,752, teachers 1,633, and that the annual expense incurred amounted to $1,388,041.

The character of educational work for negroes has changed very materially since the beginning of the century, and teachers and preachers alike are emphasizing the need of vocational training as the most important means for the uplift of this people. Booker T. Washington has, without doubt, been the most forceful apostle of this new education for his people, and, despite much protest from some of the educators of his race, he has preached the doctrine of regeneration through thrift, better farms, better homes, and better sanitation, as well as through the ordinary educational means.

INDIAN EDUCATION.

Within the past 10 years it appears that the educational care of Indian children has received especial attention along the following lines: The boys have had better and longer training in industrial work, including agriculture, stock raising, carpentry, etc., while the girls have had more help in all that pertains to homekeeping, such as cooking, sewing, nursing, and sanitation.

In a manual, prepared in 1910 for the Indian schools, by Hon. R. G. Valentine, the Commissioner of Indian Affairs, it is declared that "We are maintaining a great system of schools for the Indians, which in a sense enrolls the entire race. * * * Our Indian

population extends into 26 States of the Union, and in a few generations at least it will have been largely fused with the citizenship of these great Commonwealths." It is, therefore, the avowed intention of those who have charge of this branch of educational work "to make the course of study for each Indian school conform to the course of study adopted by the State or county in which it is situated." This plan is designed to put the various Indian schools, particularly the day schools, in condition for future absorption into the State school systems, because of having the same course of study and to a considerable extent the same series of textbooks. The teachers and supervisors, however, are warned that "the adoption of the State courses of study by Indian schools must not be used as an excuse for the inclusion in the work of the school of anything that is not of recognized value to Indian pupils. The welfare of the pupils must be kept constantly in mind, and a slavish adherence to State courses would be almost as objectionable as would be the neglect to adhere to any course."

In his Annual Report to the Secretary of the Interior, for the year ending June 30, 1910, the Commissioner of Indian Affairs calls attention to the following improvements in the administration and supervision of Indian schools: (*a*) An adequate system of supervision has been provided, by dividing the whole territory involved into six districts, with a supervisor in charge of each district. (*b*) A chief supervisor has been appointed to have general direction of all the supervisors. (*c*) Plans are being formulated to follow up pupils after they leave school, in order to render them additional service, by helping them to overcome the temptation to drop back into the unprogressive customs and practices of the various tribes to which they belong. The essential features of this plan are—

that the pupil, when he leaves the reservation, shall carry a letter from the superintendent to the superintendent of the nonreservation school, acquainting the latter with the essential facts in the life of the pupil, and indicating to him the conditions on the reservation to which he will return. * * * When a pupil leaves school he will carry a letter to the superintendent of the reservation to which he returns, with directions that it be presented immediately upon his arrival. This will give the home superintendent a splendid opportunity to gather from the pupil an idea of his plans and prospects and to give the pupil wholesome advice. It will open the way to him to keep a fatherly eye on the boy until he gets well on his feet.

(*d*) The health conditions are being more carefully guarded than heretofore. The principal features of this work consist in—

(1) An intensive attack upon the two diseases that most seriously menace the health of the Indians—trachoma and tuberculosis. (2) Preventive work on a large scale, by means of popular education along health lines and more effective sanitary inspection. (3) Increased attention to the physical welfare of the children in the schools, so that the physical stamina of the coming generation may be conserved and increased.

PROGRESS OF EDUCATION IN HAWAII.

It appears from the Report of the Superintendent of Public Instruction of the Territory of Hawaii, made to the governor for the two years ending December 31, 1900, that the total appropriations for all public-school purposes during these years amounted to $738,058.41. Of this total, the sum of $19,720.09 was used for the erection of new school buildings and cottages for teachers. For the biennial period ending December 31, 1910, the appropriation for all purposes amounted to $876,440. The cost per capita of public-school education was not materially changed during the decade, but advancements were made, especially in the work of supervision, medical inspection, industrial training, and better school buildings.

One of the most interesting and suggestive features of the school statistics of Hawaii is that relating to the changes in nationality of the pupils in the past 10 years. The accompanying table is adapted from the Report of the Superintendent of Public Instruction for the two years ending December 31, 1910, and deserves thoughtful consideration.

Comparative table of the nationalities of pupils attending school in the Territory of Hawaii for the years 1900–1910.

Nationalities.	1900	1902	1904	1906	1908	1910
Hawaiian	4,977	5,076	4,983	4,906	4,767	4,354
Part Hawaiian	2,631	2,934	3,267	3,500	3,691	3,718
American	699	796	931	1,009	999	1,056
British	232	215	226	187	189	152
German	320	333	252	273	265	261
Portuguese	3,809	4,335	4,448	4,437	4,777	4,890
Scandinavian	114	108	93	82	67	.....
Japanese	1,352	2,341	3,313	4,547	6,095	7,262
Chinese	1,289	1,499	1,875	2,197	2,797	2,872
Porto Rican	.....	593	437	392	447	350
Korean	.....	.....	.....	161	168	270
Other foreigners	115	152	192	199	594	585
Total	15,537	18,382	20,017	21,890	24,856	25,770

From this table it will be readily seen that the number of Hawaiian children attending schools is gradually decreasing, and the number of children "Part Hawaiian" increasing. But the most striking change is seen in the rapid increase of the numbers of Japanese and Portuguese children. In 1900 there were 1,352 Japanese children in school; in 1910 there were 7,262, or an increase in the 10 years of more than 437 per cent. It will be observed that during the decade two other nationalities make their appearance in this medley of school population, viz, Korean and Porto Rican, while apparently Scandinavia ceases to be represented. By comparing the figures in the table here given with those relating to public and private school attendance it will be seen that the growth in public-school attend-

ance has been confined very largely to children of Asiatic or Portuguese parentage. In 1900 slightly over 38 per cent of the total number of children in the public schools were of these nationalities, but in 1910 they represented more than 61 per cent of the public-school enrollment. Meanwhile the children of American, British, and German parentage are turning more and more to private schools, for it must be that in a school where most of the children know the English language imperfectly, an English-speaking child will not be able to get sufficient attention to make proper progress in his studies. Furthermore, it appears from the figures given in 1910 that only a little over 14 per cent of all public-school pupils were classified above the fourth grade, and more than half were not beyond the third grade. The numbers in attendance upon the high schools and normal school, included in the total of public-school pupils, were 254 and 136, respectively.

Changes of vital moment have taken place in the nationality of the teaching force. In 1900 out of 352 teachers in the public schools 175 were Americans. In 1910 out of 501 teachers, only 168 were Americans. The accessions to the numbers of public-school teachers in the 10 years have come almost wholly from the Hawaiian and Part Hawaiian. There was a slight increase in the number of Portuguese and Chinese employed. This change in the personnel of the teaching staff is bound to have a marked influence on the educational work of the islands.

PUBLIC EDUCATION IN PORTO RICO.

For the year 1900, the year succeeding the American occupation, the total enrollment in the public schools of Porto Rico was 24,392. Ten years later the number had increased to 121,453, or at the rate of nearly 400 per cent. The average daily attendance during the same time had risen from 20,103 to 84,258 or at the rate of approximately 300 per cent. In 1900 there were 632 teachers in public-school work. In 1910 there were 1,692. The total annual cost for schooling per pupil in average daily attendance amounted in 1900 to $18.50; in 1910 to $14.01.

In addition to the rapid development in the teaching of agriculture, domestic arts, English language, and the various fundamental subjects in Porto Rico, there has developed a most interesting system of scholarships open to all who show marked proficiency in their studies. It is now possible for a bright pupil "in the remotest barrio within the island to be carried through to graduation at the best university in the United States entirely as a Government scholarship student." This system is in force in such a way as to encourage the students and to afford the authorities opportunity to select young people for further work in preparation for teaching,

for agriculturists, and special workers in general. At another place in this report there will be found a detailed report from the commissioner of schools, Dr. E. G. Dexter. It is enough to say here that the people of this island have taken a lively interest in the development of the public schools, and that practically most that now exists in the way of educational effort and opportunity has come since 1899, the year of American occupation.

DEVELOPMENT OF EDUCATION IN THE PHILIPPINE ISLANDS.

The development of the educational system of the Philippine Islands since the American occupation has attracted world-wide attention. When a shipload of American teachers sailed from San Francisco in 1901 in response to a call for help, a new sort of conquest was instituted. Many of the islands were then little known and their inhabitants were of many races and many tongues. Some parts were occupied by people of culture, while others were inhabited by half civilized and warlike peoples. The attempt from the first was not to force upon them American ideals of life and culture, but to use teachers from the States to start the work of education, and to prepare native teachers as rapidly as possible to take their places. The first large question to settle was to determine the language to be used in the schools. The English language was selected, for the reason that there was no common language spoken or written by any large portion of the people. This necessitated school books in English adapted to the conditions there found, and to the content in the children's minds.

Under these and many other difficulties the educational work in these islands has made striking progress. In 1910 the total number of schools was 4,531, with 9,007 teachers and apprentices. The enrollment for September of this last year of the decade amounted to 587,317, and the average monthly attendance to 337,307. As rapidly as consistent with progress and justice to the children, the relative number of American teachers has been reduced, until at this time less than 10 per cent of the teachers employed are from the States. It is almost beyond credence to assert that such a variety of school children, comprising such striking differences in capacity and customs, should be brought to use, even meagerly, a complicated foreign language as the medium of education within a decade. But such has been the case, and the experiment has apparently been fully justified. It may not be amiss to call attention to the fact that no such gigantic experiment in the teaching of a foreign language was ever undertaken before. Surely the methods employed and the results attained deserve the most careful consideration. Some competent American teacher who has been in the thick of it all ought to

organize and describe the methods and means through which such results have been achieved.

When American occupation began there were few schools and fewer competent teachers. The work given was more or less unrelated to the lives of the pupils and the opportunities before them. A little over 10 years later we find on the whole a better system of vocational training for the elementary schools than can be found anywhere in the States.

It is often instructive to note what can be done in a short time when those who know what is better are given a free hand. Through the guidance and leadership of the normal school and the various agencies for setting standards and training leaders, not only are many of the Filipino children able to read, write, and speak the English language with some degree of fluency after three years of schooling, but they are now rapidly acquiring vocational skill in many lines of work which in time will be a large asset to their people. The boys are being trained in hat making, carpentry, blacksmithing, agriculture, gardening, and various other crafts. The girls are learning cookery, lace making, embroidery, drawn work, dressmaking, plain sewing, the care of children, especially of infants, and household economics and hygiene in general. Those who have instructed the Filipino girls report that in lace making and embroidery they show great talent. It is asserted by Director White that "because of their natural aptitude for this sort of work, their patience, and delicacy of execution, the Filipino women are considered among the most skillful workers in the world in these arts, their products being classed by experts as even superior to those of the French and the Swiss." Doubtless with the help of modern methods, patterns, and appliances, this work will afford much relief to those women who under other circumstances would have little opportunity for earning an income.

Commendable progress has been made in the construction of schoolhouses. While, at the close of the decade, there is yet far from a sufficient number of passable buildings for school purposes, at the beginning the work was greatly hindered by lack of such facilities. The better buildings now being constructed, if one may judge from photographs and floor plans, seem to be particularly well adapted both in architectural features and construction to the climatic and educational conditions to be found in the islands. From the report of the director of education for 1910, it is learned that the total cost of "school building projects pending" amounted to approximately $450,000.

The most hopeful school work now in progress is without doubt that in industrial and vocational lines. On this point a further quota-

tion from the director's report for 1910 is worthy of consideration. He says, in regard to the development of industrial training:

> The opportunity presented for future development is enormous. Other countries with educational systems long established on orthodox lines encounter almost insurmountable difficulties in the reorganizing of those systems upon a practical basis. In the Philippines the organization is still in its formative period. The administration of the bureau is hampered by no embarrassing precedents; it has reasonably ample funds with which to execute its plans; and, best of all, it has in a most gratifying measure the moral support of both Americans and Filipinos in its attempt to build up here a system of instruction which will promote the industrial efficiency and material well-being of this population. Such another opportunity probably never existed anywhere. It is perhaps not going too far to venture the assertion at this time that, within two or three years from this date, no State or national government will have in practical operation a system of industrial instruction more consistent than that of the Philippines in its sequence through the various grades, or more closely adapted to the material conditions and requirements of the country.

EDUCATIONAL FOUNDATIONS.

It is certainly well within the truth to say that no decade in the world's history has such a wonderful story to tell with reference to educational foundations as that which has just passed. Within 10 years approximately $100,000,000 has been given from private fortunes for general educational endowments in the country at large. Best of all, each of these gifts has been given in a large-minded way, so that the various boards of control have much freedom and discretionary power in administering the funds and in organizing the work under their control. A brief account of each of these foundations follows:

THE CARNEGIE INSTITUTION.

In January, 1902, Mr. Andrew Carnegie gave to a board of trustees the sum of $10,000,000 in registered bonds bearing annual interest at the rate of 5 per cent. In 1907 he added $2,000,000, and, if the decade may be overstepped a few days, in January, 1911. he increased the total endowment to $22,000,000.

The purpose of the donor was to "found in the city of Washington an institution which, with the cooperation of institutions now or hereafter established, there or elsewhere, shall in the broadest and most liberal manner encourage investigation, research, and discovery—show the application of knowledge to the improvement of mankind, and provide such buildings, laboratories, books, and apparatus as may be needed." The institution was incorporated by act of Congress April 28, 1904, and it is now known as the Carnegie Institution of Washington. The executive officers are Robert S. Woodward, president; Cleveland H. Dodge, secretary. The administration offices are now in the new building known in Washington as the Carnegie Institution, located at Sixteenth and P Streets NW.

The lines of work undertaken thus far may be grouped under the following general headings:

1. Cooperative research in various lines requiring long periods of time and organized efforts.
2. Individual research in various lines by trained investigators.
3. Investigations carried on chiefly by those who give promise of scientific leadership.
4. Publication of the results of research work, in all lines, and of other scientific and useful matter not generally accessible.

THE GENERAL EDUCATION BOARD.

The General Education Board was organized in New York, February 27, 1902, and incorporated by act of Congress, signed January 12, 1903. The charter of this board, amongst other provisions, sets forth the following:

> This corporation shall have power to build, improve, enlarge, or equip buildings for elementary or primary schools, industrial schools, technical schools, normal schools, training schools for teachers, or schools of any grade, or for higher institutions of learning, or, in connection therewith, libraries, workshops, gardens, kitchens, or other educational accessories; to establish, maintain, or endow elementary or primary schools, industrial schools, technical schools, normal schools, training schools for teachers, or schools of any grade, or higher institutions of learning; to employ or aid others to employ teachers and lecturers; to aid, cooperate with or endow associations or other corporations engaged in educational work within the United States of America, or to donate to any such association or corporation any property or moneys which shall at any time be held by the said corporation hereby constituted; to collect educational statistics and information, and to publish and distribute documents and reports containing the same; and in general to do and perform all things necessary or convenient for the promotion of the object of the corporation.

This board has now as endowment the sum of more than $30,000,000, a gift from Mr. John D. Rockefeller, and holds in trust the sum of $22,000,000, also given by Mr. Rockefeller. The income from the permanent endowment amounts to about $1,500,000 annually, and is disbursed by the board in accordance with the provisions of its charter. The principal and the income from the trust fund of $22,000,000 are subject to the direction of Mr. Rockefeller or his son, Mr. John D. Rockefeller, jr.

The official staff of this corporation consists of "not less than 9 nor more than 17" board members, whose term of office is three years. Vacancies in the board are filled by the board, and members are eligible for reelection.

The board has devoted itself in the Northern States wholly to the promotion of higher education. In the South, in addition to assisting various colleges to larger endowments, it has been of very great service by supporting professors of secondary education in the State universities, and through them helping to encourage and organize the public

high schools of the Southern States. It has also used its funds and its influence in stimulating the South to a larger and more vital interest in the general problems of public education.

THE CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING.

On April 16, 1905, Mr. Andrew Carnegie addressed a letter to 25 men whom he had selected as trustees setting forth his wishes and plans. A part of this letter reads as follows:

GENTLEMEN: I have reached the conclusion that the least rewarded of all professions is that of the teacher in our higher educational institutions. New York City, generously and very wisely, provides retiring pensions for teachers in our public schools, and also for our policemen. Very few, indeed, of our colleges are able to do so. The consequences are grievous. Able men hesitate to adopt teaching as a career, and many old professors whose places should be occupied by younger men can not be retired.

I have transferred to you and your successors as trustees $10,000,000, the revenue from which is to provide retiring pensions for the teachers of universities, colleges, and technical schools in our country, Canada, and Newfoundland, under such conditions as you may adopt from time to time.

The fund applies to the three classes of institutions named, without regard to race, sex, creed, or color. * * *

While the letter further on excluded State universities from participation in this fund, in 1908 they were granted this privilege, and the original sum was increased to $15,000,000.

This foundation was incorporated March 10, 1906, under the name of the Carnegie Foundation for the Advancement of Teaching. The present executive officers are Dr. Henry S. Pritchett, president; Clyde Furst, secretary.

THE RUSSELL SAGE FOUNDATION.

The Russell Sage Foundation was incorporated in New York in April, 1907, and has an endowment of $10,000,000, given by Mrs. Russell Sage. The charter provides that—

It shall be within the purpose of said corporation to use any means which from time to time shall seem expedient to its members or trustees, including research, publication, education, the establishment and maintenance of charitable and benevolent activities, agencies, and institutions, and the aid of any such activities, agencies, or institutions already established.

In a letter, shortly after the incorporation of the foundation, Mrs. Sage stated that—

The scope of the foundation is not only national, but it is broad. It should, however, preferably not undertake to do that which is now being done or is likely to be effectively done by other individuals or other agencies. It should be its aim to take up the larger, more difficult problems; and to take them up so far as possible in such a manner as to secure cooperation and aid in their solution.

There are nine trustees of this foundation, with headquarters in New York City. The officials of the board are Mrs. Russell Sage,

president; Robert W. DeForest, vice president; Cleveland H. Dodge, treasurer; and John M. Glenn, secretary and general director.

THE JEANES FUND.

On April 23, 1907, Miss Anna T. Jeanes, of Philadelphia, gave $1,000,000 to aid in securing better rural schools for the negroes. A board of trustees was appointed to carry out the provisions of this foundation, and organized February, 1908. The executive officers of this board are: Dr. James H. Dillard, president, New Orleans, La.; George Foster Peabody, treasurer, New York City; Maj. Robert R. Moton, secretary, Hampton Institute, Va.

The expressed purpose of this board is the uplift of the negroes by the development of better rural schools. Thus far the work has been unusually successful. The board have set themselves to the task of organizing these people for self-help in all that pertains to country school and farm life.

Three plans have been outlined for this work, and these are now being carried out in what appears to be a most helpful and practical manner:

1. A teacher has been assigned to a county for the purpose of visiting and supervising all the schools in that county. In addition she has been directed to introduce simple forms of manual training, and to interest the people in better schoolhouses and school grounds. This is generally known as the Henrico plan, because it was first developed in Henrico County, Va.

2. The employment of a teacher to do extension work among a number of schools within easy reach of some central school as headquarters. This plan gives closer supervision and more immediate help to the regular teachers.

3. The third plan has been to put a man into a county and set him to the work of creating a more intelligent public sentiment for the betterment of rural schools and country life in general. He is expected also to supervise the teachers and organize them for self-improvement.

OTHER EDUCATIONAL BENEFACTIONS.

In addition to the gifts which have made these great foundations possible, a great many cheerful givers have poured out their wealth to the colleges, universities, and technical schools already established.

It is impossible to state with accuracy the total amount of general benefactions to these schools in the 10 years, for doubtless many gifts have been made which have not been reported and some have been reported which for one reason or another miscarried. But, according to the returns furnished this office, there has been a total of $179,871,644 given for higher education. This does not generally

include gifts for law schools, medical schools, theological schools, dental schools, and schools for nurses. The amount of gifts for these latter institutions has been large. It will therefore be very near to the truth to say that approximately $200,000,000 have been given to higher and professional educational institutions during the decade. This enormous sum, coupled with the amounts given for the foundations above noted, marks the decade as the foremost in the history of the nation, perhaps in all history, with reference to educational benefactions.

THE CECIL RHODES SCHOLARSHIPS.

One of the most unique and at the same time one of the most inspiring attempts to cultivate a bond of union between widely separated peoples of different nationalities is that conceived by the late Cecil Rhodes, and which is being carried out by the provisions of his will. It was a great and original conception, in that it proposed a racial patriotism broader than national boundaries, and international fellowships based on culture and the social contact of a selected body of young men. Mr. Rhodes died in 1902 and left the sum of £2,000,000 to a board of trustees, directing them to use the income from this princely sum for scholarships at Oxford University. These scholars are appointed—under conditions named or authorized—from the colonial dependencies of England, from the United States (2 from each State or Territory), and 15 from Germany, or of German birth, to be nominated by the Emperor. All of the scholarships, except those from Germany, have an annual value of £300. Those for the German students amount to £250 annually. Each scholarship is for a term of three years.

The first American Rhodes scholars were appointed in 1904, and up to 1910, 178 young men from the United States have enjoyed through this benefaction the privileges of this great university. Dr. Parkin, the organizing representative of the Rhodes Scholarship Trust, in an article on "American Rhodes scholars at Oxford," in the North American Review for June, 1909, says:

> Starting with a profound belief in the high destiny and beneficent influence of the British Empire, and eagerly desirous to promote the permanent unity of its various parts, while increasing their strength and usefulness, his first intention as a means to this end was to bring the youthful vigor of the colonies into touch with the experience and culture of the Mother Land, in the belief that both would thereby be benefited. As time went on, his advancing thought led him to conceive that still higher ends could be served by the cooperation of the United States with his own country in carrying forward the work of civilization, and still further that the increasing influence of Germany made its support and sympathy for the same purpose of the utmost importance. He believed that great good would result to the world from a mutual understanding between these various peoples, and using the means which he had in his hand he took the step that seemed to him most likely to promote such an understanding. His plan was very simple. He would secure as the agents of his purpose picked young men of these

nations. For these he believed that the strongest bond of sympathy would be created by a common education. He therefore arranged that, for all time to come, nearly 200 scholars of these countries should be educated together at the most ancient and famous seat of English learning and training.

WORLD MOVEMENTS IN EDUCATION.

It may not be out of place in this general and incomplete survey of progress to call attention to certain world movements in education. These have developed in part as a result of international conferences, visiting commissions, interchange of students, and, above all, of the world-wide distribution of printed matter bearing on all phases of educational administration and policy. Each progressive nation is eagerly learning from the others, and the gain made by one is taken up and adapted by the others. Naturally the relative emphasis which each of these movements will receive in any country will depend on local traditions and customs.

(1) Public education for all, at public expense, is a goal toward which the whole civilized world is more or less unconsciously advancing. Some occupy an advanced position in this regard, while others are struggling far in the rear. But everywhere there seems to be a growth in this direction. The argument for public education gains strength in proportion to the growth of public respect for human life and the human spirit. Poverty and parental neglect ought not to offer absolute impedimenta to the progress of the children of any nation. But there is much yet to do to break down that selfishness which has condemned the less fortunate children of many nations to an unfair chance. Compulsory education for the sake of both the child and the State is relatively speaking a new phase of this movement. But it is a most significant phase.

(2) Closely associated with the growing consciousness that children have a right to an education is the related idea that they deserve good care from parents, teachers, and the public in general. The world over, the child-welfare movement is gaining ground. Naturally it exhibits itself in various ways and with varying emphasis in different countries. The more enlightened and humane nations are demanding more and more sweeping restrictions on the rights of parents or others who force young children to a life of labor, and take from them that opportunity and longing for play which their natures crave and their education demands. Charles Dickens made an effective appeal in the early part of the last century, in an emotional way, and now a more careful study of child nature is enforcing in a rational manner the essential needs of children. There is still much to learn and more to do before the children will be treated according to their deserts, and in line with the life they should lead. But the situation is hopeful, and the world-wide interest in playgrounds, child study, juvenile courts, medical supervision, and child hygiene will eventually issue in better treatment of children in the home and at school.

(3) The spirit of science is now at work in the world in a more effective fashion than at any other time in human history. Traditional ways of thinking and doing are no longer piously reserved from the scrutinizing inquiry of the truth seeker, and while the "unanimity of the wise" is still in the distant future, honest inquiry is its necessary forerunner. Earnest investigators, everywhere, are known to each other, and in their search there exist no national boundaries and no insuperable barriers to common understandings and mutual assistance. The education of the last century kindled this spirit, and the coming century will reap its rewards.

(4) Vocational training, much discussed at present, is essentially the product of a few decades. But the purposes and intent of the movement have entered into the educational consciousness of the world with a rapidity unlike that of any subject of recent years. True, the work is still inchoate and more or less indefinite, but it appears as a promise and foretokens the accomplishment of a long-felt need. Word comes from China, Japan, Egypt, Australia, the Philippine Archipelago, Iceland, all of Europe, and the western world that it is time to teach the children to make some specific preparation for the world's work, in addition to teaching them the essentials of the older curricula. Whether this movement will fulfill its promises will depend on wise understanding and sane, steady administration. Meanwhile the call for help comes from all directions, and the willingness to learn from all is the spirit of all.

The movement for promoting agricultural education is peculiarly pronounced and widespread at this time. In Japan, India—especially in British India and those native States tributary to the British Government—Egypt, South Africa, England, Ireland, Canada, Netherlands-India, and some of the South American Republics, and in our country a new emphasis is being given to instruction in agricultural subjects. How far this work will operate to modify the older curricula, or to influence general economic and social conditions, can not be foretold. But surely good will come, and the purposes of education will be broadened, and, let us hope, deepened.

(5) The movement for the education of women has not only made great progress in European countries but is recognized in Japan and in awakening China as indispensable to national progress. This movement shows some remarkable features in India. In the Indian National Congress, which gives free opportunity for the expression of native opinion, leaders from different communities and States of India have been specially pronounced in their conviction of the importance of making large provision for the education of women and the breaking down of their traditional seclusion. It is a most hopeful sign to find everywhere that the rights of women in matters educational and social are being recognized, for surely this means accelerated progress for the coming years.

CHAPTER II.

HIGHER EDUCATION IN THE UNITED STATES.

By Kendric Charles Babcock,

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HIGHER EDUCATIONAL TENDENCIES.

Any discussion of recent movements in the realm of higher education in contrast to developments of earlier periods must take cognizance of several strong tendencies which have become more and more clearly marked. Especially notable in the last 10 years are the following: A great expansion of the functions of colleges and universities; a marked elevation of standards, especially of graduate and professional instruction; a great improvement in the business organization of both public and private institutions; a completer cooperation of agencies for promoting higher educational interests; an unprecedented drafting of university experts into State and National service; and a thoroughgoing investigation and discussion of standards and methods of instruction and administration. Reorganization and wider service on the part of various institutions, rather than the establishment of new educational institutions, have marked the recent era. Unwarranted ambitions and pretentions of certain universities have been outgrown and weak departments discontinued. Here and there a "university" has voluntarily changed its name to college, and a "college" has become an academy.

Abundant frank, perhaps savage, criticism of colleges and universities has been widespread. The public, leaders of great industries, secondary school men, alumni, members of faculties, and presidents themselves have participated in this criticism with varying degrees of knowledge, prejudice, passion, and dogmatism. The faults charged to higher education—ineffectiveness, traditionalism, wastefulness, snobbery, irreverence and agnosticism, and the unfitting of men for really useful lives—have found expression in the strident voices of the native-born; they have crept into newspaper headlines; they have made spicy articles for popular as well as educational magazines.

But there is nothing very new in note or in motive in all this complaint and criticism. A century and a half ago, William Smith, who

later became provost of an academy which was the forerunner of the University of Pennsylvania, thus criticized contemporary colleges:

The first [class of the whole body of people] consists of those designed for the learned professions; by which they understand *divinity*, *law*, *physic*, and the chief offices of the State. The second class consists of those designed for the mechanic professions, and all the remaining people of the country.

Such a division is absolutely necessary; for, if the shortest way of forming youth to act in their proper spheres, as good men and good citizens, ought always to be the object of education, these two classes should be educated on a very different plan. The knowledge of the learned languages, as the means of acquiring other useful knowledge, is indispensably necessary to the first class. To the second, the time thus spent might be otherwise employed, as they never have occasion to make use of those languages. A less extensive acquaintance with the sciences, except arithmetic and mathematics, will also serve their purpose.

Any scheme, then, that either proposes to teach both these grand classes after the same manner, or is wholly calculated for one of them, without regarding the other, must be very defective. And yet so it is, that public seminaries are almost universally calculated for the first class; while a collegiate school for the instruction of the latter, is rarely to be met with. This class of people, by far the most numerous, and also the hands and strength of every government, are overlooked, and have nothing but this alternative left them, either to be satisfied with what small portion of the arts and sciences they can glean at private schools, or to go through a course of learning at colleges, for which they have neither time nor use.[1]

In 1826 the governing board of Amherst College received a copy of the "Report of the Amherst Faculty"—a very notable contrast to the recommendations contained in the "Address to the Trustees of Amherst College by the Class of 1885." In that report the following paragraphs occurred:

One fact, we take it, is becoming more and more obvious every day. The American public is not satisfied with the present course of education in our higher seminaries; and the great objection is that it is not sufficiently modern and comprehensive to meet the exigencies of the age and country in which we live. * * * The complaint is, and if our ears do not deceive us it daily waxes louder and louder, that while everything else is on the advance our colleges are stationary, or if not quite stationary that they are in danger of being left far behind in the rapid march of improvement.

Why, it is demanded, such reluctance to admit modern improvement and modern literature? Why so little attention to the natural, civil, and political history of our own country and to the genius of our Government? Why so little regard to the French and Spanish languages, especially considering the commercial relations which are now so rapidly forming, and which bid fair to be indefinitely extended between the United States and all the great southern Republics? Why should my son, who is to be a merchant at home or an agent in some foreign port, or, why, if he is to inherit my fortune, and wishes to qualify himself for the duties and standing of a private gentleman or a scientific farmer—why, in either case, should he be compelled to spend nearly four

[1] W. Smith, Discourses on Public Occasions in Amer. (2 ed. 1762), opp. p. 47–8.

years out of six in the study of the dead languages, for which he has no taste, from which he expects to derive no material advantage, and for which he will in fact have but little use after his senior examination.[1]

The indictment presented in the vigorous protests of the present time is certainly serious enough, and much of it is well founded. But the responsibility for the alleged faults is by no means easily placed. The loudest complaints come from the secondary schools; but the tremendous increase in the number of high schools and the wide variations in their organization make the present a time of great uncertainty of aim and function in the field of secondary education, where the problems are more difficult and pressing than in any other section of the educational world.

A long distance already traveled is not always a source of comfort in the weariness and perplexity of the day's end; and the great stretch of progress between the college of the middle of the eighteenth century, or the lineal descendant of that college in the middle of the nineteenth century, and the university of to-day does not prove the perfection of the present institution or system. But it is both interesting and significant of the process of advance in education to contrast the statesmanlike utterances of the present president of Yale University with these words of President Clap, of Yale College, spoken in 1754:

> Colleges are *Religious Societies* of a Superior Nature to all others. For whereas Parishes are Societies for training up the *Common People*, Colleges are Societies of Ministers for training up persons for the work of the Ministry. * * * Some, indeed, have supposed that the only design of Colleges was to teach the Arts and Sciences. * * * But it is probable that there is not a College to be found upon Earth upon such a Constitution.[2]

While Yale is still true to her early function of training ministers, the range of her 10 departments, reaching up to the forest school and the graduate school, and the depth of her democratic sentiment show how wisely she has kept step with the nation's progress while keeping faith with herself.

STANDARDS IN EDUCATION.

The wide demand for the elevation and better definition of standards is not simply an academic matter. Several of the most important standardizing agencies have direct, practical, and even vital reasons for demanding improved standards and a more exact classification. For example, the State board of health or of medicine in many States receives authority to establish the conditions upon which a license to practice medicine in the State shall be granted. Frequently it is required that the candidate shall have graduated

[1] Foster, Administration of College Curriculum, 99–100.
[2] Quoted in Foster, Administration of College Curriculum, 33.

from a "recognized" or "reputable" medical school. But who shall determine which medical schools are recognizable or reputable? In order to meet this reasonable demand and to prevent the establishment of many varying standards, the American Medical Association, through its Council on Medical Education, has done most valuable service in promoting general recognition of the standard set for medical colleges by the revised ordinance of the State of New York, and adopted by the Carnegie Foundation for the Advancement of Teaching as its standard:

> An institution to be ranked as a medical college must have at least six professors, giving their entire time to medical work, a graded course of four full years of college grade in medicine, and must require for admission not less than the usual four years of academic or high-school preparation or its equivalent, in addition to the pre-academic or grammar-school studies.

It is in the same line of definition and improvement of standards that the National Association of State Universities endeavors to determine what professional schools may be called standard or "reputable:"

> We may define a standard American university to be an institution * * * (4) which offers professional courses based upon the completion of two years of collegiate work, in law or medicine or engineering.

The results of this campaign for improved conditions of medical institutions and practice, a campaign in which the medical profession, the universities and medical college men, and the Carnegie Foundation for the Advancement of Teaching have united their efforts, may be seen both in the field of medical education and in the raised standards in various States for admission to the practice of medicine. An editorial in the Journal of the American Medical Association (Aug. 19, 1911) gives this summary:

> At the beginning of its work in 1905, after a thorough investigation of conditions, the Council [on Medical Education] formulated two standards of medical education, one for immediate adoption, and an ideal standard for future consideration. These standards were not for any one State or any one section, but for the entire country. The result is that nearly all colleges are up to or beyond the standard recommended in 1905 for "immediate adoption," while more than a third of the colleges (42) have, so far as entrance requirements are concerned, adopted the ideal, namely, a four-year high-school education, at least one year to include thorough courses in physics, chemistry, biology, and modern languages.

In 1910, after two inspections of medical colleges, the Council on Medical Education had secured such unprecedented improvement in physical equipment and methods of medical education that it placed in its class A 61 colleges or schools of medicine giving a complete four-year course and 10 schools, departments, or colleges of medicine doing acceptably the first two years only of a standard four-year course.

In the endeavor to define the standards for admission to the bar, for admission to practice dentistry, pharmacy, optometry, or veterinary medicine, and for granting high-school teachers' certificates, a similar process of standardization must go on. Authority must be lodged somewhere to determine what constitutes a "reputable" law school, a "reputable" college, and a "reputable" normal school. Nor is this merely a matter pertaining to this country alone. The uncertainty of the meaning of American degrees, not to mention the unfortunate uncertainty as to their genuineness, which troubles European universities and officials in dealing with American students pursuing graduate work and holders of American professional degrees desiring to practice their professions in European countries, is a standing reflection upon the administrative methods of controlling degree-granting institutions. The President of the Republic of Cuba in February, 1911, recommended a regulation refusing recognition by the National University of Cuba to professional degrees which are not recognized by the States in which they are issued as sufficient to exempt holders of them from examinations for practicing their professions.

The desirability of a certain amount of uniformity of standards and of prescriptions for admission to the practice of a profession in the different States is undisputed. The mobility of the population of the United States increases rather than diminishes, and lawyers, physicians, and teachers rightly inveigh against the various and often unusual requirements for licenses as they seek to change residence. The legal regulation of these matters rests and ought to continue to rest wholly with the States; the standards of education and of requirements for the professions will for a long time to come vary in different sections; yet definite progress toward uniformity is taking place through meetings of national associations of professional men; through such meetings as the conference of the chief State school officers of the North Central and Western States at Salt Lake City in November, 1910, and at Topeka in October, 1911; through the coordinating activity of the Bureau of Education of the United States; and through reciprocal agreements like those made for the indorsement of medical licenses between the States of New York and Indiana, New York and Wisconsin, and New York and Utah.[1]

The organization of the Association of American Universities in 1900 gave to the European universities almost for the first time something approaching a national standard for judging American collegiate degrees. The acceptance of this standard for practical purposes by one great institution was conveyed in the following commu-

[1] Seventh Annual Report of the Education Department of the State of New York (1910), pp. 273–280.

nication from the faculty of philosophy of the University of Berlin to the secretary of the Association of American Universities in July, 1904:

The faculty of philosophy of the Friedrich-Wilhelm University have the honor to notify you of the following regulation concerning candidacy for the doctor's degrees, adopted on July 19, 1904:

The faculty recognizes every baccalaureate degree (A. B., B. Sc., etc.) acquired at an American university as the equivalent of the German *testimonium maturitatis* (Maturitätszeugniss).

Second. In order to have graduate work pursued at the American university accredited by this faculty, upon proper approval of the ministry, toward the three years of study prescribed by this university for the degree of doctor of philosophy, the candidate must have taken his graduate work at one of the institutions represented in the Association of American Universities. The candidate must, however, have been in residence at a German university for at least three semesters.[1]

The secretary of the association at the same meeting announced informally that the Dutch Government had taken official action, by a royal order of February 12, 1904, by which students holding the degree of bachelor of arts from one of the institutions of the Association of American Universities should be admitted without examination to Dutch universities under all faculties.

Valuable as this recognition of the high standard of the bachelors' degrees granted by members of the Association of American Universities undoubtedly is, the slowness with which that association has enlarged its membership has worked not merely a hardship but also an injustice to many American students seeking degrees in Europe. Not many institutions will seriously complain of the limitation placed upon the recognition of the equivalence of graduate study in America with that prescribed by the University of Berlin for its degree of doctor of philosophy, even though the holder of a degree from a strong college in America is probably quite as well advanced toward his Ph. D. as the German university student at the end of his first year. But just ground for complaint certainly exists in the fact that the bachelor's degree from a large number of other institutions is now quite as significant as a measure of power and achievement as the corresponding degree from the institutions composing the membership of the association. An association "composed of institutions on the North American Continent engaged in giving advanced or graduate instruction" can not be expected to comprise all institutions whose degree of bachelor of arts should be considered standard or first class.

At the present time at least 22 organizations, public or private, are engaged more or less effectively in determining the standards of in-

[1] Journal of Proceedings and Addresses of the Sixth Annual Conference of the Association of American Universities (1905), pp. 10 and 11.

stitutions which come within their jurisdiction or are connected with the proper functions of the organizations. These are:

American Academy of Medicine.
American Conference of Pharmaceutical Faculties
American Dental Faculties Association.
Association of American Law Schools.
Association of American Medical Colleges.
American Medical Association (Council on Medical Education).
Association of American Universities.
Association of Colleges and Preparatory Schools of the Middle States and Maryland.
Association of Colleges and Preparatory Schools of the Southern States.
Association of Collegiate Alumnæ.
Bureau of Education of the United States—Division of Higher Education.
Carnegie Foundation for the Advancement of Teaching.
College Entrance Examination Board.
Dental Faculties Association of American Universities.
Methodist Episcopal Church.
Methodist Episcopal Church South.
National Association of State Universities.
New England Association of Colleges and Preparatory Schools.
New York State Education Department.
North Central Association of Colleges and Secondary Schools.
Society of Mechanical Engineers.
United States Department of Agriculture, Bureau of Animal Industry.

The Bureau of Education of the United States has but recently undertaken to share in the evaluation of the work and standards of institutions of higher education. The appointment of a specialist in higher education and the organization of the Division of Higher Education are the first steps in the fulfillment of carefully worked-out plans of the bureau for the prolonged, difficult, and delicate task of ascertaining exactly the worth of the degrees granted by the widely varying institutions in the United States. As a Federal office, responsible only to the Federal authorities, with no reasons for prejudice for or against sections, States, or particular institutions, with means at its disposal for gaining the necessary information as to the organization, the resources, the equipment of buildings, libraries, laboratories, and lands, the personnel of faculty and student body, the dominating spirit as tested by present conditions and by alumni, the logic of its position gives promise of opportunities for service to education both unusual and permanent. In contrast with the States, its service will be nation-wide; instead of varying standards of judgment in different sections, one standard will be applied to all; without power to coerce, its chief instruments will be impartiality, insight, and publicity. Having no funds to give or withhold and no special propaganda to promote, and having a reasonable probability of the acceptance of its judgment both at home and abroad, the bureau already feels assured of a cordiality of cooperation in its investiga-

tions which has not always been granted to other investigators of like purpose. If the bureau can prepare and publish a classification of the degree-granting institutions of the country upon such broad principles and upon such adequate information as to commend itself to all bodies having to rate the products of these institutions, always granting the necessity and reserving the right to make revisions of the classification upon later information, a large service will be rendered to the whole group of educational interests of the country.

ENTRANCE REQUIREMENTS.

The process of standardization of professional schools and of colleges and universities necessarily involves the question of standards of secondary schools. This is especially true in the widening areas in which prevails the system of accrediting high schools by institutional or State authority, so that their students may enter higher institutions without examination. In these regions the bond of sympathy, understanding, and coordinate aims between the higher schools and the professional colleges on the one hand, and the secondary schools on the other, grows stronger and more vital. The North Central Association of Colleges and Secondary Schools, one of the vigorous standardizing agencies, gives its chief consideration to the preparation of lists of accredited schools in the 13 States which have representation in that association. It publishes annually a list of all high schools accredited by its regular board of inspectors. The association has for some time had under consideration the classification of colleges in the same area, but no list has as yet been published.

The very tightening of this bond between the higher and the middle schools has raised new and acute difficulties of administration, as well as of theory, for both parties to the relation. From the high schools are demanded immediate practical results, benefits for the great majority in terms of dollars per month next year, regardless of the desirability of taking 2 or 4 years more to gain better equipment and impetus for the life of the next 50 years. On the side of the college, the university, or technical school, the question is rather that of standards for estimating the particular forms of discipline urged as substitutes for those which long experience has tested and approved.

A most hopeful sign in the present confusion and transition in which experimentation with entrance requirements goes on, sometimes seriously and conservatively, sometimes almost merrily and flippantly, is that few, if any, of the larger institutions are quite so confident of the finality of their schemes of admission, and of their curricula for turning out gentlemen and scholars, as most institutions were 25 years ago. The proportion of fixed requirements to electives, the range of electives, and the methods of administration

vary widely. Several of the great State universities have almost alarmingly enlarged the range of combinations possible for admission. Agriculture, commercial subjects, domestic science, shop work, and music claim peers' rights under the new constitution alongside Latin, chemistry, and geometry. Harvard University and the University of Chicago have also announced rather radical changes in requirements and methods for admission.

It is no longer a valid argument for the retention of Latin to say that the old prescription of requirements produced strong men in citizenship, affairs, and letters. Many leaders in higher education are convinced that other subjects properly taught give equally good results in discipline, inspiration, and cultural uplook and outlook. An admission of the correctness of the position of these leaders by no means settles the general outline of the subjects which may be offered in substitution. The burden of proof is placed squarely on all new claimants for recognition; they must make clear beyond a reasonable doubt that their instruction contributes surely and directly toward producing a mind soundly trained to reason exactly, and vitally quickened with serious purpose to learn more and to serve better. The recognition of shopwork, for example, as a proper subject for secondary instruction and for recognition as an elective for college entrance is not fundamentally based upon the desire to produce more and better mechanics; more corn, apples, and milk are by-products of instruction in agriculture in the high schools, from the point of view of the college committee of registration.

The appeal of the new subjects to the interest of the pupils in the secondary schools is a valid reason for their introduction into the curriculum, in so far as it enables schools to train a larger number for a larger activity in society. Colleges and universities, on the other hand, have a right to insist that those who are presented to them by the secondary schools shall have power to think, to appreciate, to express, and to accomplish, in more than one field of scholastic endeavor. It is with this demand in mind that such institutions as the University of Wisconsin and the University of California have voted to accept vocational subjects only when properly combined with corresponding fundamental subjects or when taught in a manner specially approved. In blocks of one, two, three, or four units, constituting as a rule not more than one-fourth of the total requirements for admission, the vocational or industrial subjects may be presented, with such limitations as these: Mechanic arts (woodwork, forge work, etc.) when linked with freehand and geometrical drawing; domestic science with chemistry; horticulture with botany. The University of California accepts bookkeeping for one unit, stenography one or two units, but with the positive restriction that proficiency in these subjects is to be tested at the

university. For one unit in stenography and typewriting "the student must show ability to take stenographic dictation at the rate of 75 words per minute;" for two units the rate is 125 words per minute. The University of Wisconsin announces that "work in any of the vocational groups will be accepted only after inspection and approval by the university."

The insistent demand of the secondary-school men has been heard and heeded in two significant quarters, not wholly disconnected. Resolutions regarding entrance requirements were passed by the department of secondary education of the National Education Association at its meetings in 1910 and 1911. It should be noted that the committee of nine making the report which was adopted by the department in 1911 contained only two college or university men, Charles H. Judd, professor of education, University of Chicago, and Alexis F. Lange, professor of the theory and practice of education and dean of the faculties, University of California. The committee holds that "college admission should be based solely upon the completion of a well-planned high-school course," which it proceeds to define as follows:

(1) A quantitative requirement of 15 units, exclusive of physical training and music. (2) Every high-school course should include at least three units of English, one unit of social science (including history), and one unit of natural science. (3) Every high-school course should include the completion of two majors of three units each and one minor of two units, and one of the majors should be English. (4) A maximum of two units of mathematics and two units of one language other than English. (5) Four units of the 15 should be left as a margin to be used for additional academic work or for mechanic arts, household science, commercial work, and any other kind of work that the best interests of the student appear to require. (In place of either two units of mathematics or two units of a foreign language, the substitution under proper supervision should be allowed of two units consisting of a second unit of natural science.)[1]

The same social and educational pressure which produced the report just described and effected its adoption is in evidence in the modified plan for entrance which the University of Chicago, as the result of two years of committee work, has adopted and announced:

The new program accords to the high schools a much larger degree of independence in the arrangement of their curricula than has hitherto been the case. The university will still require 15 units of work, four full years in an approved high school (from which students may enter by certificate), but it will allow much greater flexibility in the studies which the high-school students may pursue during their preparatory course.

The university has been moved to make these changes largely because it appreciates and sympathizes with the increasing demand laid upon high schools to meet the important needs of their own communities. In response to pressure of this kind the schools have found it necessary to introduce a larger amount of vocational work than was formerly the case. The old academic

[1] From the official circular of the committee, 1911.

subjects, rightly or wrongly, are not thought to subserve these community needs so efficiently as are subjects of a more practical character. In view of this movement which is going forward in the high schools of the country, the university has come to feel that its previous entrance requirements are out of harmony with the primary obligations of the schools in a way which is undesirable for all concerned. The action which is now taken is not dictated by a loss of numbers, for these have steadily increased; it is rather based upon the conviction that its previous practice is no longer wise and that the best interests of the schools and of the university will be subserved by other arrangements.[1]

The new entrance requirements of the University of Chicago are:

(1) English, three units.

(2) Three units of one group and two units of another from the following five groups of studies—

(*a*) Ancient and classical languages.
(*b*) Modern languages.
(*c*) History and economic science.
(*d*) Mathematics.
(*e*) Natural sciences.

(3) Two units selected from any of the five groups just enumerated.

(4) Five units elective, which may be "selected from any subjects for which credit toward graduation is given by the approved school from which the student receives his diploma." Certain restrictions are involved with this statement, for example, "Latin may not be continued in college unless at least two units be offered."

A very important feature accompanying the change in the entrance requirements of the University of Chicago is the announcement that "as an offset to this increased freedom the university expects hereafter to receive no students with conditions." As a further safeguard and by way of supplementing the careful examination of schools which precedes placing them on its approved list with the privilege of entering students by certificate, the university especially emphasizes its reliance upon the records made by students coming to the university from a particular school. Records of the standings of the students sent by the school will be carefully prepared by the university for its own use and for the authorities of the school. Another supplementary and very promising feature of the plan—one which should add definiteness and sympathy to the process of coordinating the work of the school and the university—is the suggestion of visits of representatives of the schools to university classes in which work is done continuing that of the schools. It would not be surprising if this inspection by the teachers should operate distinctly to the improvement of instruction in the freshman and sophomore classes in the University of Chicago—and in any other university making the same excellent experiment—as the former personal inspection by

[1] J. R. Angell, "New Plans for Entrance and Graduation at the University of Chicago." The University of Chicago Magazine, III, 283 (July, 1911).

examining officers of the university operated to the improvement of instruction in the secondary schools.

The new plan of admission to Harvard University, which was adopted by the faculty in January, 1911, is to be tried as an alternative for the present examination system; only time will tell whether it will supplant the old system or not. The main features of the new order are:

(1) The satisfactory completion by the applicant for admission of an approved school course, not, be it noted, the completion of a course in an approved or accredited school, which is the essence of the accrediting system. To be admitted under this plan the official detailed statement of his school record, which the applicant must present, must show (*a*) the subjects studied by him and the ground covered; (*b*) the amount of time he has devoted to each subject; (*c*) the quality of his work in each subject. To be approved, this statement must show (*a*) that his course has extended over four years; (*b*) that it has been mainly devoted to languages, science, mathematics, and history, no one of which may be omitted; (*c*) that it must include two studies which the candidate has pursued beyond their elementary stages.

(2) Satisfactory examinations in four subjects: (*a*) English; (*b*) Latin for candidates for the degree of A. B., and French or German for candidates for the degree of S. B.; (*c*) mathematics or science (physics or chemistry); (*d*) any subject not already selected from (*b*) or (*c*) from the following list: Greek, French, German, history, mathematics, physics, chemistry.

Clearly this is a system radically different from any now in operation. It might be called an examination-discretion system, the operation of which may enable Harvard to pick the best from a very wide range of applicants, to extend the present narrow area from which the university draws its students, and to establish that close and vital relation with public high schools against which the present system of rigid examinations has steadily operated. The chairman of the committee on admission of Harvard University, Mr. J. G. Hart, writes:

The new Harvard plan does not prescribe what or how a boy shall study, but leaves the schools free to work out their own systems of education in their own way in accordance with the best interests of their pupils and the needs of the communities in which they are situated. * * * No longer will it be necessary to fit the school course to the college prescriptions; no longer will it be necessary for the boy to know several years in advance that he is going to college. No boy who has had a rationally planned school course will be prevented from entering, even though he may decide to come to Harvard very late in his school course. Heretofore Harvard has been confined in her choice of students to a pitifully insignificant number of schools. Hereafter the college will be able to draw good students from any good school in the country.[1]

The history of the movement for less dependence upon examinations as the test for admission indicates that Harvard is trying out a new plan which has been practically agreed upon by the New England colleges, and which they will adopt if it works well at Har-

[1] Harvard Graduates Magazine, xix, 375. (March, 1911.)

vard. At a meeting of the Association of New England Colleges, held at Amherst in November, 1910, at which were representatives of Yale, Harvard, Dartmouth, Williams, Amherst, Bowdoin, Vermont, Trinity, Middlebury, Tufts, Boston University, Wesleyan, and Clark, a resolution reported by a subcommittee consisting of Presidents Hadley, Lowell, and Hyde was unanimously adopted:

Resolved, That the association recommends that the New England colleges adopt a system of tests for admission in which a certificate shall be taken for quantity, and an examination shall be held in a limited number of substantial subjects for the quality of school work.[1]

In his annual report for 1911, President Hadley discusses at length the problem of admission requirements to Yale. Concerning the policy just described, he says:

Harvard has committed itself to this policy. The arguments in its favor seem strong. Ten years ago I urged its adoption by Yale, but the practical difficulties of putting it into effect were shown to be very great. Until we know how Harvard is going to meet these difficulties it would be premature to discuss the plan or to try to decide whether it is better or worse than the old-fashioned certificate system.[2]

But when all has been said that can be said in favor of the greatest enlargement of the range of possible subjects for satisfying entrance requirement, it remains true that a certain element of educational politics lies behind the demand. The very words, "agricultural," "industrial," "vocational," appeal with peculiar force to any recently awakened constituency feeling its way toward a realization of its social ideals. Perhaps it is one manifestation of the improving attitude of democracy toward education. The exact objects to be attained by higher education are by no means clear in the average mind of to-day. Until recently the way to a higher education has stretched along a path very hard, limited, and closely prescribed, especially for the boy who has aroused somewhat late in his secondary course to the inspiring possibilities of his own development. This prescribed curriculum has too often lacked attractiveness and stimulus, and however admirable it may still be for those whom it grips, there may be other forms of preparation for effective disinterested leadership than the traditional fitting-school course. But even so, why should the colleges and universities be expected to accept for the satisfaction of entrance requirements all the widely different subjects which any well-intentioned, forceful, hobby-riding superintendent or principal may think necessary in order to adapt his school to its local constituency?

Be it noted that the quarrel here is not between the college and community which chooses to support polytechnic, trade, or vocational

[1] Harvard Alumni Bulletin, xiii, 271.
[2] Reports of the President and Secretary of Yale University, 1911, 9.

secondary schools, but between the college which properly insists that certain fundamentals of ability and certain degrees of knowledge and power must be demonstrated on the part of applicants for admission, on the one hand, and on the other those persons who insist that any form of knowledge or skill is as good as any other, provided it generates interest, enthusiasm, and ambition. It was, and is, a foolish demand that all educational roads should lead to a collegiate Rome. Such Rome is no longer one city, but many. Her seven hills have become seventy times seven, with here and there a great mountain rising above the lesser hills, a great university full of inspiration for research and for leadership. But the way to all of these demands the same old qualities of mind and will, and even sterner preparation, however varied.

THE WORTH OF DEGREES.

The improvement in standards of higher education and of admission to various professions has given new definiteness and worth to collegiate and university degrees. To men without a degree, certain doors are closed, or opened only with great difficulty. The mere possession of the degree of C. E., for example, does not guarantee its holder a position or the ability to retain the position if he gets it; but the degree certainly raises a presumption that its possessor is a better engineer than a man of like age and native ability without the degree. The requirement of a standard bachelor's degree for a certificate as a high-school teacher in many States gives a positive value to that degree, while other degrees are presumably signs of personal or professional attainments. The public and the professions have the same right to demand that these degrees shall at least approximate a widely accepted standard as they have to insist that coins in the market shall be genuine and approximately full weight. The very fact that a degree has real value encourages the multiplication within the limits of the law of agencies for supplying the demand for degrees.

The practice of granting easy, unusual, and even absurd degrees by institutions legally chartered has been the source of strenuous protest and complaint in many circles for the last 40 years. Not the least offensive phase of the practice is that of selling to foreigners degrees purporting to be granted by American institutions. In his Reports for 1876 and 1880 the Commissioner of Education discusses at length certain notorious cases, especially that of the American University of Philadelphia and its allied institutions, whose granting of medical degrees resulted in the exposure and conviction of "Doctor" John Buchanan.

Recently the Bureau of Education has received from abroad several complaints of the continuance of the practice of selling honorary degrees, or at least of conferring them in indiscriminate fashion. An

English correspondent writes regarding the "relative value of degrees issued from various American institutions of learning," adding: "Over here we have had a bad time over the business and have been let in for a lot of trouble. Some of our men have the LL. D. from all sorts of centers." Then follow the names of six institutions, one of which is that of a well-known college in Georgia, another is a Negro college in North Carolina, while a third is really a preparatory school in Wisconsin.

The number of institutions conferring degrees of uncertain value has increased rather than decreased in recent years. The mere fact that each one probably possesses legal authority under a charter to grant some of the degrees mentioned later in this chapter does not of itself give weight to the degree. The varying amount of work required by degree-granting institutions for the highest and most honorable academic degrees is illustrated by the following statement:

For the degree of Ph. D. the University of Chicago requires—

1. As preliminary a bachelor's degree from the University of Chicago, or one substantially equal to it.
2. At least three years of resident work at the university, with the possibility of substitution of nonresident work for resident work to a limited extent, and with the possibility of credit of one and a half years for resident work at another university. "The degree of doctor of philosophy may, in exceptional cases, be granted after one year of residence."
3. A thesis which must "constitute an actual contribution to knowledge."
4. A satisfactory final examination upon work done in preparation for the degree, such work to include one principal and either one or two secondary subjects.

Per contra, the Potomac University, Washington, D. C., recently made the following stipulations for granting the degree of Ph. D.:

1. The completion of four of the following courses:
   - Course A.—Dealey: Development of the State.
     Willoughby: Nature of the State.
   - Course B.—Coman: Industrial History of the United States.
     Ely: Outlines of Economics.
   - Course C.—Ripley: Trusts, Pools, and Corporations.
     Dewey: Financial History of the United States.
   - Course D.—White: Money and Banking.
     Commons: Trade Unionism and Labor Problems.
   - Course E.—Macy: History of Political Parties in United States.
     Wilson: The State.
   - Course F.—Simond: History of American Literature.
     Stedman: The Victorian Poets.
   - Course G.—Kulpe: Philosophy.
     Schwegler: Philosophy.
   - Course H.—Ross: Social Philosophy.
     Parmelee: Sociology and Anthropology.
   - Course I.—Keane: Ethnology.
     Smyth: Through Science to Faith.
   - Course J.—Simond: History of American Literature.
     Stedman: The Victorian Poets.

2. The requirement of a thesis. [In this particular case a manuscript already under discussion was to be offered.]

3. The university would supply the books and all necessary expenses "for $90, payments to suit."

4. The statements of the person to whom the offer was addressed would be accepted without corroboration.

The terms upon which the degree of doctor of divinity might be obtained from the Odessa University are stated in the following letter recently received by the assistant pastor of a large church in Washington, D. C.:

Secretary's Office.
Henry Clough, Secretary.

Representative in England:
Rev. W. Thornton Burke, B.D.,
7 Doverfield Road, Brixton Hill,
London, S. W.

THE ODESSA UNIVERSITY.

(Incorporated under the laws of Congress of the United States of America.)

ODESSA, WASH., *September 21, 1911.*

DEAR SIR: It has been represented to me that you are well entitled to the Degree of DOCTOR of DIVINITY, by reason of your work in the Congregational Church. If you care to send ten dollars for our Library and answer a few questions, a Diploma for that Degree will be sent you. A Fine DIPLOMA hung on the wall of your Study will enlarge your reputation.

A similar letter was recently received by an anesthetist in the office of a Baltimore physician, and sent to this bureau for its judgment. In this case the honorary degree of doctor of science was offered. In transmitting this letter to the Federal authorities the physician properly commented: "If the 'laws of Congress' allow these people to send diplomas for $10 and to support themselves by so doing, they *ought* to be looked into."

The differentiation of earned and honorary degrees becomes steadily more sharply marked. The stronger institutions exercise the privilege of granting honorary degrees with ever greater restraint and discretion—except upon anniversaries and inaugurations—confining themselves, as a rule, to the granting of the degrees of doctor of laws, doctor of divinity, doctor of letters, doctor of civil law, and occasionally master of arts. Only in very rare instances does a college grant an honorary bachelor's degree. By general agreement the degrees of doctor of philosophy and doctor of science are looked upon as research degrees, to be granted only after three or more years of specialized graduate study and research. Even the master's degree, which was formerly granted "in course" by many colleges to those of their graduates who pursued for two or three years after graduation literary or professional work, is now generally granted only for a year of regular postgraduate or advanced work done in residence. The use of any bachelor's degree or of any one of the three higher degrees just named, granted *honoris causa*, unless so designated, for

the promotion of professional standing or prestige, is rightly looked upon as approaching unprofessional conduct.

For these reasons, stricter Federal and State laws are urgently needed to safeguard the public from imposition and to insure that only standard degrees receive recognition. The sufficiency of the powers and functions of the regents of the University of the State of New York, in regard to chartering and controlling colleges and professional institutions, is admirable, but, unfortunately, almost unique. It is almost disheartening to contrast the inspiring practical results arising under the exacting and well-enforced laws and regulations of New York with the results flowing from the very loose, almost totally inadequate laws of the District of Columbia, under which degree-granting institutions obtain charters. Section 61 of the education law of New York requires that institutions, to receive power to confer degrees, must have resources of at least $500,000, and make suitable provisions, approved by the board of regents, for buildings, furniture, educational equipment, and proper maintenance, while still other sections further protect degrees in that State. But under the laws relating to the District of Columbia the Eastern University received a certificate of incorporation November 11, 1904, with the following powers, among others:

> To issue to those who have pursued such courses of instruction therein [as previously specified], and duly completed courses prescribed thereby, or passed the prescribed examination either by correspondence or otherwise, the degrees of B. A., M. A., Ph. D., B. S., M. D., LL. B., LL. D., Ph. G., LL. M., DD. S., D. D., D. O. (osteopathy and osteotherapy), D. M. (medical massage), D. C. (chiropractic), D. E. (electrotherapeutics), D. P. (chiropody), and D. Psychol.; also the grating of diplomas setting forth the completion of such work as may entitle the persons completing the same to evidence thereof in the form of such diploma. * * * To establish institutions of learning of the character hereinbefore set forth; to have one or more offices and to carry on all and any part of its corporate business in any State or Territory of the United States, or in any foreign country or place, and to have and exercise all powers conferred by the laws of the District of Columbia upon corporations.
>
> (4) The term of its existence shall be perpetual.
>
> (5) This corporation reserves the right to establish branches of this university in all parts of the world.

The laws of some of the States regulating the incorporation of colleges are so loose that some remarkable institutions have appeared.

The Carnegie University was chartered in Delaware. Its published announcement for 1911 contains no evidence as to its property, its faculty (save its president and corporation officers), or its laboratories, but states that the institution is authorized to give all kinds of degrees, following up the statement with the enumeration of 26 different degrees, ranging from doctor of philosophy to doctor of dermal art. The activity of the Carnegie University, through its affiliations, is illustrated by the following advertisement in the New York World of Sunday, September 10, 1911:

BE A DOCTOR of mechano, psycho-electrotherapy (drugless healing), chiropody; special day and evening courses; 40 per cent reduction; earn before graduation; position procured. Institute Mechano-Therapy (affiliated with Carnegie University, chartered), 128 W. 66th.

The Oriental University, of Washington, D. C., under a Virginia charter, has granted the degrees of doctor of orientalistics and bachelor of aeronautics (B. Aer.).

Degrees conferred in absentia.—The demand for opportunities to obtain degrees by doing work through correspondence has led several long-established colleges to adopt some of the methods of correspondence schools, applying them even to the highest research degrees, contrary to the general tendency to grant such degrees only for work done in residence. The following may be cited as examples: Ewing College, Illinois, carries this announcement in its catalogue:

For some years Ewing College has had a nonresident course leading to the degree of Ph. D. Only those who have completed the full college course are entitled to enter for this degree. Its object is to give the student some of the latest and best thought, to arm him against error of the times, and to equip him for the battle of life. No course has brought the college so much favor as this. Those desiring to know more concerning it should write the president for literature on the subject.

Grove City College has for some years offered in its post-graduate department courses leading to the Ph. D., requiring "at least one session's attendance," which session may be a summer term. Only courses in philosophical studies are now offered. Illinois Wesleyan University for many years had a large registration of nonresident students and granted numerous degrees for such nonresidence work, but the trustees voted in 1905 "that enrollment should cease in all [nonresident] courses by July, 1906. * * * It was further agreed that those who enrolled in the courses July 1, 1906, should be given four years from that date in which to complete their work, and that no degrees should be conferred in these courses after June, 1910."

The following table of statistics for certain years will indicate more fully the practice of these three institutions:

Students and degrees in certain institutions.

	Ewing College.			Grove City College.			Illinois Wesleyan University.		
	1905	1907	1910	1905	1908	1910	1900	1905	1909
Total regular collegiate registration	23	34	27	269	169	192	146	126	235
Nonresident enrollment	22	21	16	16	50	80	448	375	100
Regular undergraduate degrees (or regular seniors)	6	6	9	68	50	22	26	12	20
Number of Ph. D.'s granted	3	5	5	2 ([1] 2)	6 ([1] 3)	8 ([1] 7)	18	10	9

[1] Clergymen.

COOPERATION OF SUPERVISING AND INVESTIGATING AGENCIES.

The various agencies already enumerated which are concerned with the problems of standardization and with the betterment of conditions in the field of higher education have realized anew the need of cooperation and have taken steps to secure it. A vast field, keen struggle for its possession, complexity of involved interests, and the strong tendency to centralization or combination in the business world have slowly but surely demonstrated that failure to cooperate would mean wasteful duplication of effort, the perpetuation of unnecessary divergent standards, and continuance of unwholesome rivalries.

Recognizing these facts, numerous forms of cooperation appear. The Bureau of Education finds cordial and generous assistance at the offices of the Carnegie Foundation for the Advancement of Teaching and of the General Education Board. Reports prepared at great expense of time and money and representing the maturest judgment of highly trained and experienced specialists are mutually and semi-confidentially exchanged. Conferences of chief State school officers of the North Central and Western States, conferences of secretaries or business agents of State universities, and the various State and sectional organizations of college and university men like the College Presidents' Association of Pennsylvania, and the Association of Colleges in the State of New York, are highly significant evidences of the movement toward completer cooperation.

A large part of the total number of colleges and universities in the United States are either under direct control of some religious denomination or in close affiliation with it. The very existence of many of them is a witness to denominational zeal and denominational competition rather than to a wise understanding of present and future needs of the community, just as the multiplication of weak churches in many a small town is a standing reflection upon the economy, altruism, and efficiency of the denominations concerned. The workings of social forces in many cases have already remedied some of the evils of this excessive planting of denominational institutions. Many colleges and universities in the West and South have disappeared after an ephemeral and troubled existence, frequently sharing the fate of the overambitious town or land company primarily interested in their promotion.

Recently the great denominations concerned in the determination of which colleges have reasonable expectations of large permanent usefulness, and which in the nature of educational progress are likely to be candidates for entire suppression or amalgamation with stronger institutions, have organized a very practical and far-reaching federation. In February, 1911, the first step in this direction was taken at a conference of secretaries of boards of education of various

churches. There were present the secretaries of the boards of education of the Methodist Episcopal Church, of the Presbyterian Church (both northern and southern divisions), of the Methodist Episcopal Church, South, of the Congregational Education Society, of the Lutheran Board of Education, and of the College Board of the Presbyterian Church. The second meeting was held in April, 1911, and there were present in addition to those just mentioned a representative of the Educational Board of the Society of Friends and the secretary of the General Education Board. The following principles were deduced as a result of the discussion of the situation in general:

1. A large degree of cooperation between educational boards is practicable and desirable. Through them we might secure a better geographical distribution of denominational colleges and valuable comity of relations in various particulars, a proper standardization of institutions; in many instances, a better location and distribution of institutions, and large assistance through appropriations to weak but high-grade schools for a limited period until they could meet the requirements of larger foundations, such as the General Education (Rockefeller) Board.

2. A conviction that the denominations should offer loyal support to the public school system and cooperate in efforts to secure larger appropriations for grammar and high school from cities, counties, and States, and that this in no way interfered with their true mission in the sustentation of denominational colleges.

3. A strong conviction of the legitimacy and the absolute necessity of a certain number of denominational academies, occupying strategic positions in territory not fully occupied by the public high schools. There was a unanimous agreement that notwithstanding the growth of the public high school, there was a work which it did not and could not do, and that the support and maintenance of these denominational academies was perfectly consistent with proper loyalty to the public and high school system.

4. There was unanimous agreement that there should be a direct approach by the denominations to the problem of religious instruction at State university centers. It was shown that the State university needed the denominational college, and that in very important particulars the denominational college was helped by the State university in many ways.

At the conclusion of the meeting it was voted to organize an interdenominational conference of representative denominational agencies, with the membership including the corresponding secretary of every denominational board of education, and in addition one representative of this board, presumably a layman appointed by the board itself. The following committees were authorized to report at a later meeting:

(1) Comity and cooperation.
(3) Academic efficiency.
(3) Interdenominational campaign.
(4) Religious work in State and denominational institutions.
(5) Secondary schools.

In discussing before this conference the problems of common interest to the denominations concerned, the corresponding secretary of

the board of education of the Congregational Church said concerning the merging of colleges:

> I think we shall agree that if the time has not come it will, inevitably, when this great question will have to be seriously considered. There is no doubt that if we were starting anew in this business of founding colleges we would not place some of them where they are now. They are not strategically located. Some were placed in the rural region. A present system might place them near centers of population. Some of them are too thickly clustered, and do not serve as many of the population as they might. Some are under the auspices of denominations closely allied, and can not, therefore, justify themselves in these days when religious bodies are coming together.
>
> If these facts are recognized as to things that are past then a vital question arises, whether it is not time to readjust, as we may be able to do, this old order and combine certain colleges to the advantage of all concerned.
>
> But if this system can not be wisely changed at present, the committee would also consider whether there might not be more cooperation among our colleges in the way of courses of study. Two colleges, fifty or a hundred miles apart, need not try to cover the same ground, but one college might supplement the work of another.

The actual withdrawal of a denomination from a field which it had entered probably unwisely is found in a recent action of the Reformed Church in America, in regard to one of its institutions in Oklahoma, which was established in the hope and expectation that the church would find a favorable field for development in the new State. After 10 years of effort and thorough investigation the board of domestic missions of the Reformed Church voted to withdraw from Oklahoma and transfer its work there to other denominations; and the board of education, feeling in like manner the lack of fellowship and the failure of reinforcement by new arrivals of their own denomination, voted in May, 1911, to close the institution in question and to sell the property, feeling "that there were those upon the ground who could do the work better than we."

Too much must not be expected from the first years of this systematic cooperation of denominational agencies. Time alone can reveal which of the several institutions of a particular denomination in a given State like Ohio or Iowa, will finally survive as sturdy and energizing institutions. Local pride is strong; denominational pride is stronger, and the last experiment in increasing numbers by diversification of courses, such as music, art, domestic science, agriculture, etc., has not been tried. But more and more a common policy of pressure from the great boards of a church, especially boards which have positive authority like the board of education of the Methodist Episcopal Church, South, and boards which have large influence in directing the benevolences of rich givers must be exercised to promote institutions which give promise of undoubted and cumulative usefulness, and to restrain or restrict or reduce those struggling patheti-

cally to realize ambitions which to a sober and judicious outsider seem as misguided and unlikely of realization as they are honorable and time honored.

STUDENT WELFARE MOVEMENTS.

Expansion and the elevation of standards are fortunately not the only ideas looming large in the vision of college and university administrators. The danger of mere numbers, the fear of superficial training, the waste of energy due to miseducation, and the lack of direct personal influence upon the students have all at times depressed wise presidents and faculties. The machinery of a rapidly growing institution is improved from year to year; by careful planning of curriculum, and elaborate provision for classrooms, laboratories, libraries, and gymnasiums, each student may be given a location on the campus and a name on the books; by feverish endeavor, endowments are amassed and incomes augmented to meet the overwhelming demands of the hordes which besiege the gates of great institutions. Great clubhouses like the Harvard Union arise, but after all, the very heart of the most vital problem of education, the inspiration of the student to seek and to work out his best capacities through intellectual, moral, and physical endeavors, has too often been overlooked. Especially is this true in those institutions whose registration has passed the thousand mark.

There are some professors whose ideal university is an institution without students, but the wise men in college administration will agree with the sagacious words of President Benjamin Ide Wheeler, that something must be done immediately to humanize the machine. Some adequate means must be provided to furnish each individual student with sympathetic, patient, stimulating, and widely informed counsel during the first year or two of his college course. Not more machinery, bigger equipment, smaller classes, more courses, nor even better classroom instruction will meet the needs of tens of thousands of students at that highly critical stage when they make the transition from the restraints and prescriptions of a high school and home to the all but unrestrained and ill-regulated life of universities which have neither dormitories nor commons. Such students ought to have the touch of a great personality, an elder brotherliness, along with stern discipline in straight thinking, in mathematics, or economics, and clear speaking in English.

It is heartening to notice the lengthening list of institutions in which the realization of these needs takes the form of definite provisions for student welfare in the large human sense of that good word. The enormous difficulties of the present problem in the great State universities of the West, which have been and still are the most delinquent in this matter, rather from sheer inability to cope

with the situation than from lack of sympathy or misunderstanding, may be understood in part through a study of the figures of the growth of those organa of the Commonwealth. The registration of 16 of the larger State universities, chiefly in the West, in 1894–95 was 17,298; in 1909–10 it was 43,319, a growth of about 150 per cent. Similar figures for 16 of the larger privately supported institutions for the same period show an increase from 25,746 to 44,580, or about 75 per cent; but better provision, at least in the matter of housing and feeding, has long been made by this latter group of institutions than by the public institutions. Exception should also be made of State universities in such southern States as Virginia, North Carolina, and Georgia, which have had dormitories almost from their beginnings. Fifteen years ago, not more than 2 or 3 of the 16 State institutions considered owned or controlled dormitories of any sort, and very few had even a modest Young Men's Christian Association or club building. It was not at that time held to be one of the functions of the State to provide for the welfare of students outside of actual instruction in its various forms.

Steadily, but by slow degrees, a better sentiment moved State boards and legislatures and private givers to provide for students wholesome and attractive housing, ennobling social surroundings, and opportunities for intercourse with each other and with the instruction force. On the side of physical education and the support of sports and athletics little complaint can now be made. The visitor who strolls through the Harvard stadium, the stadium of Syracuse University, and the enormous plants devoted to athletics at the University of Wisconsin and the University of California marvels at the generosity of appreciation for this nonacademic phase of education. Several State universities have inaugurated the movement for dormitories for their students. Large appropriations have recently been made for dormitories for women at the Universities of Minnesota and Wisconsin. Cornell University has in like manner undertaken to provide for men, as it has long provided for women. But these provisions of buildings, while they give opportunity for improved intercourse and for placing better influences about the student body, do not reach the heart of the difficulty.

Princeton University's provision of a preceptorial system is the most elaborate, expensive, and widely discussed of welfare experiments of the last 10 years. Nearly two college generations have now been trained under it. Special interest, therefore, attaches to President Woodrow Wilson's summary of the purposes, workings, limitations, and prospects of the system in his annual report for the year ending January 1, 1910:

> This is the fifth year of the preceptorial system. We can look at it and assess it now in the light of experience. * * *

It is not primarily a system of instruction. Its chief object is not efficient teaching. It is not an improved classroom method or a new way of drill to keep the pupil up to his tasks. It is a system of *study* primarily intended for the reading courses, to give to them means of work as direct, as simple, as individual as those long employed in the laboratories of the sciences. It has been too commonly supposed by observers—even by admiring observers—of the system outside Princeton that it is its characteristic feature that teachers meet their pupils informally in very small groups for intimate instruction. That is not the fundamental matter. The essence of the system is that "classes" and classrooms are done away with, except for purposes of drill. A "course" does not consist in following a certain teacher's lectures or in "getting up" certain texts to be recited in class. It consists in a body of reading such as any mature man would naturally undertake, whether he had the advantage of experienced guides and teachers or not, if he wished to make himself master of a certain subject. The men read subjects; they do not get up courses. * * * Grown men who have ceased to be schoolboys are systematically reading great subjects. That is the essential and central fact of the system. It is not a new method in pedagogics. * * * Their [the preceptors'] object is, of course, to see that the men have actually done the reading that is to be discussed; but it is also to see that they have understood it, to render them counsel, assistance, and stimulation; and many of them have told me with great pleasure how they have seen their men grow under the process, begin to think for themselves, and insensibly learn to use books naturally. * * * In brief, these conferences between preceptors and small groups of men assigned to their guidance (the groups range in number from two to six men) is a method of associating older students with younger upon as natural a footing as possible.

The system is a method of study, but also a method of close association between pupil and teacher. Intimate association—informal, unforced, natural—is the only certain means of intellectual contagion. A rare occasional man here and there may spread the contagion of mind and spirit which is the real power of the teacher by means of lectures and formal classroom exercises, * * * but the rest of us must be known and sampled in some everyday fashion of constant intercourse to be felt as comrades of the mind, to be recognized as persons whose influence can not easily be shaken off or forgotten. * * * Our preceptors are, almost without exception, men of unusual parts and of unusual personality. They make themselves felt as men, as intellectual guides, as original thinkers and independent students of their subjects, and often also as friends and enjoyable companions. If they were not such men, vitality and reality would go out of the system at once. * * * If I had not what seems to me conclusive testimony to the effect that the preceptorial conferences have served these genuine and highest purposes of education, I would feel that I must report them useful, indeed, but a great disappointment. * * *

It is outside the fields of drill, formal training, and occasional explanation that the preceptorial system has its proper application and its most noticeable and admirable results. * * *

The system has accomplished no revolution in human nature; and it has not overcome the very serious impediments which exist in the present competitive social structure of our universities or in the extraordinary development among our undergraduates of activities of every sort which absorb their attention and divert their energies from their university work. Teacher and pupil do not live in the same atmosphere. * * * The undergraduate lives in a world in which other things than study take precedence of it as if of course. He turns aside from the things which chiefly engross him to have a brief conference with his preceptor about reading which lies remote from the ordinary courses of his

thought. And his preceptor can not be his companion in the matters which constitute his life. The one lives in one world, the other in another. They are not members of the same family or of the same social organism; and the rivalry between the life and work of the student generally results in the victory of the life. * * * Under our present university organization the preceptorial system can be carried only to the borders of the life of the place, not to its center; and so long as this is the case its results, admirable as they have been, must disappoint us. * * * The system has approved itself and has had admirable results. We can by degrees give it better subject matter, better means, and full ranks of teachers. As soon as possible we must give it also an atmosphere to breathe.

President Wilson's approval of the scheme after five years of experience is strongly confirmed by the opinion of preceptors and of the trustees, who have been responsible for the enormous increase in expenses involved in the system.

Having in mind the same need of intercourse for the underclassmen especially, President A. Lawrence Lowell, of Harvard University, in his inaugural address in October, 1909, commented upon the naturally large waste of energy because of inadequate provision for the direction of student interest and activity:

The social relations of the undergraduates among themselves are quite as important [as the intellectual relation of the students to one another]; and here again we may observe forces at work which tend to break up the old college solidarity. The boy comes here sometimes from a large school, with many friends, sometimes from a great distance and almost alone. He is plunged at once into a life wholly strange to him, amid a crowd so large that he can not claim acquaintance with its members. Unless endowed with an uncommon temperament, he is liable to fall into a clique of associates with antecedents and characteristics similar to his own; or perhaps if shy and unknown, he fails to make friends at all; and in either case he misses the broadening influence of contact with a great variety of other young men. * * * The change from the life of school to that of college is too abrupt at the present day. Taken gradually, liberty is a powerful stimulant, but taken suddenly in large doses it is liable to act as an intoxicant or an opiate. No doubt every boy ought to learn to paddle his own canoe; but we do not begin the process by tossing him into a canoe and setting him adrift in deep water with the caution that he would do well to look for the paddle. * * * It would seem that all these difficulties could be much lessened if the freshmen were brought together in a group of dormitories and dining halls, under the comradeship of older men who appreciated the possibilities of a college life and took a keen interest in their work and their pleasures.

The new president of the State University of Iowa, a vigorous, experienced, young alumnus of the institution, enters upon his task with full knowledge of the history and needs of his alma mater and with the frankest determination to lay especial stress upon this problem of the welfare of students rather than upon the problem of expansion, diversification of work, or the development of graduate instruction. To enable the students to find themselves through new measurements of their own powers and capacities, through contact with earnest, inspiring advisors, and through touch with new elements of the world's

thinking, and to enable them to make necessary adjustments and decisions as to future courses at the earliest possible moment, means not only the saving of time and money to the individual student, but it means to the university itself a more economical use of its energies, a clearing of its machinery of retarding elements, and the speedy elimination of the intellectually incorrigible or delinquent.

From time to time during the past 20 years an approach to a solution of this problem has been made through advisors, by which each student was more or less arbitrarily assigned to some member of the faculty, who was expected to combine the functions of friend, father confessor, and disciplinarian, who had to be consulted about certain matters, like programs, and who might be consulted about others. Few, if any, of these experiments proved really successful, and as one looks back upon them he is inclined to smile at the naiveté with which whole faculties voted to try a scheme so little cognizant of certain prejudices and indifferences of the average student. More recently several institutions, of which the University of California may be taken as a type, have developed a system of advisors upon a decidedly different plan. While the aim is substantially the same, namely, that of establishing friendly relations between a student and some instructor, in the procedure lies the key to its success. Instead of arbitrarily assigning the student to some instructor, with the expectation that each member of the faculty might take his share of a more or less perfunctory and disagreeable task, a group of 25 young instructors is carefully selected, men who have direct dealings with freshmen or sophomores in their classes. To these men the chief advisor, on consultation with his men, or with the student, or with the principal of the school from which the student comes, makes such assignments as seem in his judgment likely to be most helpful to the student. After a year or two of experiment it was found advisable to make a small addition to the salary of the instructors serving in this new capacity, partly with a view to compensating them for the additional work involved and partly to recompense them for the expenditures which most of them felt it necessary to make in order to promote a friendly relation with their groups of students. Dean Hutchinson reports:

> The year's experience seems to show that the system is really working. It is found that the students, although they sometimes do not seem very responsive when everything is running smoothly, yet, having made the personal acquaintance of an advisor, naturally turn to him when they get into any sort of difficulty. The reports of the advisors show that the aggregate numbers of meetings between students and advisors run up to several thousand for the first term of the academic year just closing. * * * The general feeling among the advisors is that the students show an increasing desire to meet them halfway. This is emphasized by the fact that a considerable number of upper-class students continue their personal relations with their advisors, although there is no formal attempt to maintain the system beyond the first year. Two or three things in particular have become increasingly apparent

concerning the future development of the system. The first of these is that the crux of the problem lies in the proper oversight of the freshmen. Nearly 50 per cent of the students who get into serious difficulties of one sort or another are freshmen. The whole problem is chiefly concerned with providing a gradual transition from the paternalism of the high school to the freedom of the university and guarding against the bewilderment and confusion of a too sudden plunge into the sundry distractions of college life. If this transition can be properly safeguarded during the student's first year here, the remaining years may be left to take care of themselves. * * * To get the best results, the time must some day come when not merely a small group of instructors will be cultivating friendly, personal, human relations with their students, but when it will be the general rule for all lower-division instructors (of the first two years), when one of the qualifications of the work of instruction will be the desire and ability to be teachers in this more intimate sense.

Much is continually said, and said with good basis of truth, concerning the lack of religious instruction for students in State universities. Few members of the faculties of State universities would hesitate to admit that the lack of broadly religious instruction is a source of weakness in the State university organization. Very few, however, would advocate the introduction of such instruction into the curriculum of a State institution. In institutions like the University of Minnesota, located in large cities, and surrounded by powerful churches, very positive and helpful influences play upon large numbers of students, but the best efforts are still far short of meeting the needs of the institution. The movement, begun many years ago at the University of Michigan, for grouping about universities dormitories, guild houses, or other church homes for the care of denominational groups of students has not made general progress. Around the University of Michigan there are the following guilds or other societies, whose chief object is to exert some religious influence upon students:

Hobart Guild, connected with St. Andrew's, a Protestant Episcopal Church, has Harris Hall, with two endowed lectureships, one for the establishment and defense of Christian truth and one for Christian evidence;

Tappan Presbyterian Association, with McMillan and Sackett Halls and a student pastor;

The Wesleyan Guild, with the Henry M. Loud lectureship;

The Baptist Students' Guild, with Tucker Memorial Building, which is partly a students' dormitory and partly a general meeting and recreation place. A full-time director is employed for student work;

The Students' Catholic Club.

The Presbyterian Church, by authority of its General Assembly, has undertaken more systematically than any other denomination to supply the religious needs, particularly of Presbyterian students, in State universities and State colleges. In March, 1910, Dr. Richard

C. Hughes, lately president of Ripon College, was placed in charge of this form of religious work. It should be noted that this is not merely a movement for the support of the local Presbyterian Church near a State university. The student pastor appointed under the direction of the board of education of the church in cooperation with the local synod devotes his whole time to promoting the welfare of students of his denomination. At the University of Illinois, for example, there are 760 students affiliated with the Presbyterian Church; $60,000 has been raised for an endowment for the university church, and nearly $40,000 is subscribed for the construction of the building and its equipment. In similar manner endeavor is made to provide for the Presbyterian students in the Universities of Kansas, Michigan, Wisconsin, Nebraska, Colorado, Iowa, and Arkansas.

Adjacent to the University of California the Catholic Church has constructed a large and beautiful building for housing its student activities; at the University of Wisconsin, opposite the campus, in connection with the new university church, a Catholic house has recently been opened.

Among the most important existing agencies for student welfare must be mentioned the college Young Men's Christian Association and Young Women's Christian Association, so generally established throughout the country. Disconnected organically from the organization of the State institutions, they perform many highly desirable functions, both social and instructional as well as religious, not yet undertaken by State institutions themselves. At least one of these associations, that at the University of North Dakota, admits to full membership both Universalists and Catholics, as well as persons identified with other denominations. Alongside or in connection with 35 State universities one or both of these associations appear. While in some cases the associations receive the use of rooms in university buildings for their work, several of them own very handsome buildings of their own. Madison Hall, at the University of Virginia, costing $75,000, and the great association buildings at the University of Illinois, the University of Wisconsin, and the University of California, all located on the campus or adjacent to it, are evidences of the great immediate helpfulness of these semiaffiliated organizations.

In many instances the university contributes directly to the support of the work of the associations, not for its religious work but for services rendered in connection with the social welfare of the students, in providing helpful agencies for securing rooms or employment, or in maintaining a common meeting place under wholesome conditions. These grants by the authorities of State universities take the form of free rent, heat, and light, contributions toward the cost of useful student handbooks, and payments toward secretaries' salaries. The University of Illinois, for example, contributes

to the handbook $100, the University of Iowa and the University of Oklahoma each pay $400 toward secretaries' salaries. The State of Arkansas in 1909 appropriated $750 toward the maintenance of the Young Men's Christian Association, and a like sum for the Young Women's Christian Association. The Clemson (State) Agricultural College of South Carolina goes even further. The board of trustees, according to its Twenty-first Annual Report, makes an annual appropriation of $3,000 " for carrying on the religious work of the college; $500 is paid on the salary of the four resident ministers, representing the Baptist, Episcopal, Methodist, and Presbyterian denominations; $500 is used to bring to Clemson ministers of other Protestant denominations not represented by the resident ministers, and $500 is paid toward the salary of the resident Young Men's Christian Association secretary, who lives in the barracks and works with the students."

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CHAPTER III.

EDUCATIONAL LEGISLATION IN 1911.

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Division of School Administration, Bureau of Education.
(Chief of the Editorial Division since October 19, 1911.)

CONTENTS.

Introduction.—General laws.—State school officers and boards.—County boards and officers.—District, township, and municipal officers.—Administrative units.—Schoolhouses.—Teachers: Examination and certification; salaries; pensions.—Normal schools.—Teachers' institutes.—Compulsory education.—Child labor.—School census.—Transportation of pupils.—Holidays.—Textbooks.—Fire drill; instruction in fire dangers.—Medical inspection.—Addendum: Physical training; playgrounds; additional subjects of instruction; high schools; agricultural, industrial, and vocational schools; special types of schools; higher educational institutions; professional schools; professional practice; schools for special classes; welfare of children; dependents and delinquents.

INTRODUCTION.

Without question the year 1911 was productive of more educational legislation of value than any previous year in the history of the Nation. Forty-three legislatures[1] were in session, and in all of them, practically without exception, an attitude of marked friendliness was shown to the cause of public education.

The public-school system no longer occupies a place of minor importance in the deliberations of legislative bodies, and the chairmanship of a committee on education now offers opportunities for distinction and effective work that are not excelled. No figure was more conspicuous in the Pennsylvania Legislature in the last session than Senator Tustin, and none was more prominent in New Jersey than Senator Frelinghuysen; and so it was generally. Education is recognized as the greatest work of the State and leadership in its affairs is eagerly sought by men of the highest type.

The past year was one of peace, prosperity, and unusual freedom from political strife—West Virginia and Tennessee were the only States in which political differences reached an acute stage. The general conditions, therefore, were favorable, for there was no overshadowing interest to distract popular attention; the time was ripe

[1] Namely, those of Alabama, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Porto Rico, Rhode Island, South Carolina, South Dakota Tennessee, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming.

for substantial educational advances; able men were ready for their advocacy, and the results are apparent upon the statute books as the high-water mark of legislative achievement in behalf of education.

GENERAL LAWS.

Pennsylvania.—The passage of the new school code of Pennsylvania is one of the most significant events in education in recent years. The Pennsylvania school system was the growth of more than a century; no general revision had ever been made, and there were in actual effect more than 200 general laws and nearly 2,000 special acts, some of which dated from the first years of the nineteenth century. The system that thus developed by gradual accretion was like a rambling farmhouse, serving well its purpose in many respects, but loosely hung together, without unity of design, inconvenient, often difficult to understand and to use, and ill-adapted to the application of improvements which modern investigation and experience have proved to be desirable. Notwithstanding its shortcomings, the old familiar structure was a part of the life of the people, and they were loath to see it demolished. But a new organization has been erected, in which are incorporated many of the old substantial timbers; it is essentially new, in that its parts have been rearranged, its redundancies and superfluities have been eliminated, and new features have been introduced to give it unity and harmony and to bring it in line with the best modern ideas in school organization.

The code is a model of constructive legislation; but its successful enactment was due not only to its internal excellence but to the intelligent persistence with which the people of the State were addressed practically without cessation for four years, and to the skill with which an overwhelming public sentiment was aroused in its favor.

One of its most significant changes relates to the organization of school districts. The entire system of independent districts under special laws is abolished, and the districts are now classified according to population, each class being governed by uniform laws. Existing civil subdivisions, cities, incorporated towns, boroughs, and townships, are the units of organization, but the lines may be changed by prescribed methods to make "independent districts." This term, however, refers merely to the fact that such a district is not coextensive with any other civil subdivision, and the laws relating to independent districts are the same as those governing other districts of the same population.

The creation of a State board of education appears to be an innovation of importance, but the provisions relating to it are such that it has little independent power. Its functions are not clearly differentiated from those of the superintendent of public instruction, and

it is apparently expected that the latter official will be the ruling force in the board of which he is president. Provision is made for a State school fund, such as exists in some form in nearly every other State. This fund and its income are to be under the control of the new State board of education, and apparently will furnish not only one of the most important reasons for the existence of that body but the only regular means for the maintenance of its operations.

A change of undoubted significance is that which contemplates the gradual acquisition by the State of the so-called State normal schools, of which there are 13. These are now local or stock-company schools, receiving State recognition and aid and some State supervision. Even the schools that are not acquired and operated directly by State officers will in future be subject to a larger degree of State control than in the past.

Idaho also has a new body of school laws, enacted at the session of the legislature which recently adjourned. It was the work of a commission created by legislative authority, and but few amendments, and these of minor character, were made by either branch of the legislature. The need of improvement in Idaho was more than usually manifest, for the old laws were plainly defective and incongruous, and were difficult of construction and enforcement. The revision was well done in the main, and the changes made were judicious and well considered, though neither radical nor extensive as compared with some other recent measures of the same character. Conspicuous among the changes are (1) the increased responsibility of the State board of education, and the transfer to it of many of the duties formerly performed by the State superintendent; (2) the formation of a new class of districts with enlarged powers and greater independence; (3) a graduated scale for the length of school term and increased requirements as to length in the more populous districts; (4) changed plan of apportionment of school moneys by county superintendents; (5) an improved system of certification of teachers; (6) changed constitution of boards of trustees of rural high schools and the requirement that manual training, elementary agriculture, and domestic science be taught in such schools; (7) requirement that rules and regulations formulated by the State board of education shall be observed in the construction of schoolhouses.

Nevada.—A code prepared largely by a committee of the State Teachers' Institute was adopted by the legislature. Though it was a complete code, it did not erect a new system but did make important modifications in the system as it then existed. A characteristic feature of the Nevada organization is the absence of county superintendents; instead of this official, the 15 counties are arranged in districts, in each of which is a "deputy superintendent of public instruction." The authority of these officers is largely increased by

the new law, and many of the minor functions formerly assigned to the State superintendent are now given to them. Under the present organization the success or failure of the schools depends in a pre-eminent degree upon the efficiency of the deputy superintendents. The State tax rate is nearly doubled, the minimum county tax is raised from 1.5 to 2 mills, and the method of apportionment is changed, plainly for the better. The certificating system is recast, and all except temporary certificates are issued by State authority.

North Dakota.—A striking example of the mobility of the law in some of the western communities is afforded in North Dakota, where at the same session of the legislature a strong commission of 10 members was created to study educational systems and to present a report which will form a basis for unifying and harmonizing the educational system of the State, and, apparently within a few days, an extensive bill was passed revising and codifying the entire school law and repealing all existing provisions upon the subject. The report of the commission, accompanied by a bill, must be presented in December, 1912, and will be considered at the legislative session of 1913.

The new code, whose expectation of life is but two years, makes but few changes that are not of minor character. A new system of certification of teachers is provided; the sections relating to the organization of districts are redrawn; the plan of determining the compensation of county superintendents is changed; a month is added to the minimum school year; the period of compulsory attendance and of free attendance is increased, and other useful but not radical differences appear.

South Dakota also was the scene of a campaign for a new code during the year. A joint committee on legislation was appointed by the three leading associations of school officials and teachers, and a plan of organization was drawn which seemed to its supporters to be ideal as an educational system comprising all grades and classes of schools and institutions for instruction. Vigorous efforts were made to secure the adoption of the measure, but it was in advance of popular sentiment and was rejected by a decisive vote in the house in which it was introduced.

Arkansas.—The South, too, has felt the influence of the movement for school-law reform. In Arkansas a bill to create a commission to investigate the needs of the State school system failed to pass the legislature of 1909. The Southern Education Board, however, provided the necessary funds, and the governor appointed a commission of 20 representative citizens under the chairmanship of the superintendent of public instruction. This body adopted a plan of procedure different from that followed in other States, and though they expect to finally cover with their recommendations practically the entire

field of education, they do not anticipate the preparation of a complete code at one time. The three improvements that seemed most urgently needed were: (1) A State board of education; (2) State aid to high schools; and (3) the consolidation of rural schools. Three measures were accordingly drawn embodying the ideas of the commission with reference to these subjects, and by vigorous efforts all of them passed. Marked improvement in the educational conditions of the State is confidently expected to result.

The fruition of the labors of the South Carolina school-code commission created in 1910 has been deferred, but it is understood that the conditions are favorable for the final adoption of the measures they recommend. The proposed code was favorably reported to both houses, but the time was not sufficient for consideration, and the session closed without action.

Tennessee.—In Tennessee a well-considered general school bill amounting to a code was presented to the legislature and was favorably received, but disturbed political conditions prevented action upon it. The bill was prepared by a committee of the State School Officers' Association and financial aid was rendered by the Southern Education Board.

The original act establishing the Tennessee school system was passed in 1873, and many supplementary laws have been enacted since. Inevitably, many of the latter have become obsolete; others are now indaequate for the needs of the system as it has developed, and frequent contradictions occur in the provisions of different laws in full effect. The need of improvement is evident. The aim of the committee was "to harmonize the old and to provide such amendments as are most needed for the effective operation of the present system."

Notwithstanding the failure of the general bill, the session of 1911 rendered a great service by the passage of an act authorizing the issue of county bonds for the construction of schoolhouses. Heretofore such construction has been necessarily upon a cash basis from current funds, for there was no means of utilizing the common and effective device of extending payments over a series of years. The new law appears to be imperfect in certain particulars, but its benefit should be immediate and widespread.

Illinois.—The educational commission of Illinois, which has been in existence since 1907, has again been continued. It presented a report to the forty-seventh general assembly which was devoted largely to the recommendations of a special committee on industrial education. The commission itself, however, presented three bills which were modifications of similar measures included in its recommendations to the forty-sixth general assembly, namely: (1) To create a State board of education; (2) to prescribe a uniform system

of certification of teachers; (3) to increase the State appropriation for schools from $1,000,000 to $4,500,000. None of these bills passed, but the State appropriation for schools was increased to $2,000,000.

Montana is the latest State to undertake the general revision and codification of its school laws, and a commission has recently been created by authority of the legislature for that purpose.

Each of the States enumerated in the foregoing paragraphs has enacted or proposed to enact an entire educational code, by which all previous laws on the subject were wiped out and a new body of laws was enacted in their stead. In other States, however, changes just as vital have been made without such comprehensive action, for mere revision and codification is in itself not a radical process, although it is customary to insert, if possible, desired improvements when such an opportunity as a general overhauling of laws is presented. Georgia, New Jersey, and Delaware are perhaps the States in which the most important action not amounting to complete revision has been taken during the year.

Georgia.—The new law of Georgia is indeed entitled "An act to revise the school laws of the State of Georgia," and in its importance to the State it is worthy of rank with any law that has been enacted within the decade; but it is limited in its scope and can scarcely be rated as a code comparable with that of Pennsylvania.

The agitation for a reform of the school system of Georgia has extended over the past five years, and the State Teachers' Association, the Conference for Education in the South, and the Association of County School Commissioners have all had a conspicuous part in it. Repeatedly within that time bills in the interest of the schools have failed of passage by the legislature, apparently because the public sentiment of the State had not sufficiently crystallized in favor of progressive action; but in every instance it was evident that the efforts made were producing good results, and that the public-school system was growing rapidly in popular favor.

The legislative session of 1911 saw the final success of the movement, and a bill was passed which incorporated all the essential improvements desired by the educational organizations, and gave to Georgia a school system that will compare favorably in its structure with any State school organization in the country. The new law is a model of brevity and of clearness; it contains only 24 short paragraphs, and they leave little opportunity for misunderstanding. Its provisions do not apply to cities containing over 100,000 inhabitants (Atlanta only) or to certain county districts, and it does not interfere with the many specially incorporated local systems except in relation to the licensing of teachers; but it will reach beneficially the schools that are in the greatest need of improvement, namely, those in rural communities.

The State board of education, formerly a group of State officials, is now a professional body of importance. They will formulate rules and regulations and prescribe courses of study and a list of textbooks for the use of all common and high schools receiving State aid, but they may in their discretion modify the State courses and book list to meet the peculiar needs of individual localities. The board of education will be the final court of appeals in all controversies relating to the schools; they must provide teachers' institutes in each county, and may compel the attendance of all teachers; they must provide for the examination and licensing of teachers, and no person may teach in any school in the State without a license granted under the authority of the board. The board, however, may delegate to local municipal authorities the right to license teachers, and may revoke such delegation if the local system should fail to maintain a high standard.

The office of State school commissioner is superseded by that of State superintendent of schools, and the authority and salary of the office are increased. County boards of education are retained with enlarged powers; the professional qualifications of county superintendents (title changed from county school commissioners) are raised, and their minimum compensation is fixed at $600 per annum.

New Jersey.—The recent important legislation in New Jersey was largely the outcome of a legislative investigation initiated in 1909, the State board of education cooperating. The investigation was thorough, and disclosed in many instances what the committee considered weaknesses requiring legislative action. Twenty-three bills were presented, covering a wide range of subjects, the most important of them relating to the State board of education and the State superintendent. The abrogation of both these was recommended, their place to be taken by a commissioner of education with large powers. The suggestion to abolish the State board failed to find general favor, and was abandoned, but a radical change was made in the size and composition of the board. As finally passed the bill provided for a nonpartisan board of eight members, their full terms being eight years; and for a commissioner of education to be appointed by the governor. No restriction is placed upon the governor in the selection of the commissioner, and the first appointee was a resident of another State, an unusual occurrence in itself. Two others of the chief State school officers now in office had not been identified prior to their appointment with the States they serve, and another had for a number of years been in educational work in other States. Such a practice is not wholly of recent origin, for Henry Barnard served both Connecticut and Rhode Island in the same capacity;[1] city school boards

[1] He was secretary of the Board of School Commissioners of Connecticut from 1838 to 1842, was State school commissioner of Rhode Island from 1843 to 1849, and was State superintendent of schools of Connecticut from 1850 to 1854

have long been accustomed to disregard the accidents of birth and of residence in the selection of superintendents; but it is nevertheless highly significant of the broadening tendencies in education that even in a few instances the highest State school officer has been brought from afar, and that laws have recently been passed in several States removing wholly or in part the former restrictions in the qualifications of county superintendents with respect to residence.

The New Jersey commissioner will receive $10,000 per annum, the highest salary paid to any American State school officer,[1] and his powers are exceeded only by those of the corresponding officer in New York.

West Virginia.—The recognition which was given to the needs of education by the last West Virginia Legislature is a source of gratification to the school men of the State. Notwithstanding acute political controversies that broke the continuity of the session, no other legislature in the history of the State has done so much for education, and the result is described by the State superintendent as "an education renaissance." With the exception of four bills which were not reached, all the laws asked by the school authorities were passed. They related to State aid to district high schools, teachers' certificates, bonds for building purposes, medical inspection, and to many local matters of prime importance to the communities concerned. In addition, the appropriations to all lines of educational work were materially increased.

Alabama.—Favorable reports were received from Alabama also, notwithstanding the failure of the most important measure presented. The greatest desideratum in that State is proper provision for local taxation. There is no legal authority whatever for a district school tax, except in incorporated towns and cities. In certain cases, as that relating to the construction of schoolhouses, the law requires contributions from districts in order to secure State aid, but such contributions must necessarily be raised wholly by private subscription; there is no other way. The county school tax is limited to 1 mill, and even that can not be levied except with the approval of three-fifths of those voting at an election. About one-third of the counties levy no school tax. The constitution of the State is responsible for this condition, and the remedy must be in an amendment to that instrument. A vigorous campaign was inaugurated early in 1911 with this end in view. The proposition passed the house of representatives by an overwhelming majority, but failed in the senate by a single vote.

In other respects the action of the legislature was entirely satisfactory, and several of the laws passed were "of inestimable value" in the opinion of the State superintendent of education. The most

[1] The commissioner of education of New York receives the same amount, but must pay from it his expenses of travel on official business.

important of them related to the county superintendent, increasing the professional qualifications required, prescribing his duties in supervision more clearly, and relieving him of the necessity of acting as disbursing officer to the teachers. The certification law was beneficially amended, and more adequate provision was made for institutes. The control of all State normal schools for white students was centered in a single board, and the standards of those schools will be raised. Appropriations for common schools, rural schoolhouses, school libraries, high schools, agricultural schools, and the higher institutions were materially increased.

Delaware will in all probability have within a few years at most a plan of organization similar to that of the States about her. A special commission was constituted by the legislature in 1909 to investigate the public-school system. They presented a report in February, 1911, stating that amendments to the existing laws would give at best but partial relief, and that the only permanent remedy for prevailing unsatisfactory conditions would be in an entirely new code of school laws. As the best means of procedure they recommended the reorganization of the State board of education and an enlargement of its powers, with authority to prepare a suitable code for submission to the legislature at its next session. This course was adopted. The authority given to the new board is extensive, and, considering the high character of the members appointed, it may be expected that marked improvement will result, even if the contemplated code should fail. There seems to be every prospect of a favorable outcome to the situation.

Arizona.—In their provisions concerning education the constitutions of Arizona and New Mexico are constructed along familiar lines. The Arizona constitution requires the legislature to establish a general and uniform public-school system, including kindergartens, common schools, high schools, normal schools, industrial schools, special schools, and higher institutions. The conduct and supervision of the public-school system will be vested in a State board of education, a State superintendent of public instruction, county superintendents, and such governing boards for State institutions as may be provided by law. The superintendent of public instruction and the county superintendents are to be elected by popular vote for two-year terms. Provision is made for a permanent State school fund derived from the sale of public lands and miscellaneous sources. The income from such fund with other State school moneys shall be apportioned to the counties on the basis of pupils of school age. Sectarian instruction and religious and political tests are forbidden, and the labor of children is restricted. The legislature may prescribe the qualifications of voters at school elections.

New Mexico.—The New Mexico instrument is somewhat more comprehensive than the other, and, in addition to provisions similar

to the foregoing, prescribes the qualifications of the superintendent of public instruction; permits women to vote at school elections and to hold county and local school offices; directs that a reserve fund be retained from the apportionment of the State current school fund, and that reserve fund be used to aid weak districts to maintain at least a five months' school term, and requires that compulsory school attendance and State uniformity of textbooks be provided by the legislature.

Indiana.—A new constitution has been drawn in Indiana, and will be submitted to the voters of the State at the general election in November, 1912. The only change that it makes in the educational provisions of the constitution of 1851 is that it extends the term of the State superintendent of public instruction from two to four years. The legislature is required to provide a general and uniform system of common schools, but, except for the provision of a State superintendent, none of the details of the contemplated system are prescribed.

It is both interesting and significant to thus contrast the general expressions and the brevity of the fundamental law of one of the typical older States with the relative minuteness of that of the two latest additions to the Union.

New constitutions are contemplated for Ohio and New Hampshire also, and in each of those States the legislature has provided for a convention to draft the instrument.

STATE SCHOOL OFFICERS AND BOARDS.

Some of the most important enactments under this title were discussed in the foregoing paragraphs, namely, those relating to the State boards of education of Arkansas, Delaware, Georgia, New Jersey, and Pennsylvania, since these were intimately connected with legislation of general character.

The most important separate act of the year that involves a State administrative authority concerned with education is undoubtedly that reorganizing the board of education of Oklahoma. This marks a departure from all laws previously enacted in that it assigns to a single body direct and complete control over all the educational agencies of the State, from the primary school to the university, excepting only the agricultural schools and college.

Other State boards, that of Washington representing the type, have supervision of higher institutions as well as of common schools, but the higher institutions are managed directly by separate boards of regents or trustees.

In still other States, the board of education, so called, controls all the higher institutions, as in Iowa; or the State normal schools, as in Michigan, without intermediate boards of trustees; but they have little or no relation with other institutions or with the common

schools. In several cases boards of control have been created to administer all the eleemosynary and penal institutions of their respective States. But the extent of the authority of the board of education of Oklahoma exceeds them all. It is the legal successor of no less than 14 abolished boards, and has all the powers, rights, and privileges formerly exercised by all of them.

Furthermore, it has the following additional powers and duties: (1) To have the general supervision of the public schools of the State. (2) To prescribe courses of study for the common schools, county normal institutes, reading circles, and the higher educational institutions. (3) To formulate rules and regulations governing the issuance of teachers' certificates, and prepare questions for the examination of applicants for county and city certificates. (4) To examine applicants for State teachers' certificates, and for institute conductors' and teachers' certificates. (5) To prepare questions for graduation from the eighth grade. (6) To classify and accredit high schools. (7) To prepare reports and budgets. (8) Upon the application of the organization representing the business schools of the State, to prescribe rules and regulations to govern such schools.

There is a motive for every human action, and the excess of partisan politics in the previous management of educational affairs in the State furnished the motive in this case. In selecting the members of the new board the governor chose men of high character, representing both the leading political parties, though he was not required by the law to do so. His instructions to them were remarkable for their strength and candor, and he emphatically warned them that no political consideration would be permitted to influence their official actions in any particular.

In Utah the duties of the State board of education have been enlarged by the transfer to it of the functions of the State library-gymnasium commission, which is accordingly abolished. An arrangement, which is perhaps unique, is reported from Oregon, in which the members of the State board of education are made individually ex officio members of the board of regents of the State University.

The tendency toward centralization in administration is further illustrated by the creation in Ohio and North Dakota of boards of control to direct all State charitable and reformatory institutions. In North Dakota the State penitentiary is also placed under the same board. In Nebraska a constitutional amendment to the same effect has been proposed by the legislature for adoption by the people. Similar but less extensive consolidation has been effected in Maine, the institutions concerned being the school for the feeble-minded and the two State hospitals for the insane.

An important law was enacted in Hawaii in April, 1911, affecting the powers of the Territorial department of public instruction in relation to school moneys. A commission was created at the legis-

lative session of 1909 to investigate methods of raising and apportioning school funds, and the law mentioned was the result of their labors. The salary schedule for all teachers, supervisors, and principals in the islands will hereafter be prepared by the department of public instruction, and, when approved by the governor and published, it will have the effect of law. A biennial budget must be prepared by the department and submitted to the legislature for its action, after consideration by a board of estimate composed of specified officials, and then by the governor. All revenues derived from school taxes must be appropriated for the support of schools in the respective counties in which they are raised, in the manner provided by the salary schedule and the budget, and the legislature shall appropriate from the revenues from property taxes such an additional amount as may be necessary to meet the aggregate of such schedule and budget.

COUNTY BOARDS AND OFFICERS.

If it were asked what officers in the school organization are as a class in the position to exert the greatest power for good to the schools at large, the reply must be, the county superintendents and those performing like service. Unfortunately, however, the importance of this office has not been universally recognized in the past, and it is one of the most encouraging of recent developments that the position is receiving more of the attention that it must have before the school system can reach its highest efficiency. Election by the people is the method of selection ordained in many of the State constitutions, and in a few of them reelection more than once is forbidden. Neither provision is calculated to produce the most efficient service, and the tendency is to eliminate them, if possible.

Constitutional amendments have been proposed during the year in two States, Minnesota and Washington, both tending to elevate the office. In the first, the legislature is empowered to determine the qualifications of county superintendents, and in the second the limitation of incumbency to two terms is removed. In other States an attempt is made to remove the evils of popular election by so fixing the qualifications for eligibility that only experienced teachers and competent administrators can be chosen. Material increase in salaries in a number of States discloses the effort to attract a higher class of men than it has been possible heretofore to secure in many instances.

In Indiana, a State already blessed with a corps of county officers far above the average of efficiency, the necessary qualifications are again increased, and all the superintendents are put upon a more satisfactory salary basis. Heretofore they received $4.50 for each day of actual service, but by the act of March 2, 1911, the uniform rate

of $1,408.50, with $100 additional for travel, is fixed for all except a few in the smaller counties.

In Kansas the maximum allowed under the general law was formerly $1,200, but the new schedule enacted in March provides that in counties of over 70,000 inhabitants the superintendent shall receive $1,800 per annum. Other salaries are graded in proportion to the school population of the several counties, with $1 per annum additional for each teacher, a general increase being the result.

Another law provides that if the county commissioners are unable to fill a vacancy from residents in the county, the State superintendent of public instruction shall appoint a legally qualified person, a resident of Kansas, regardless of the county of his residence.

The maximum salary in Michigan was $1,800 under the old law, but by the act of April 26, 1911, the minimum in counties having over 300 schoolrooms was fixed at $2,000, and in other counties the minimum varies from $1,500 to $500, according to the number of rooms, the lowest minimum being for counties with less than 50 schoolrooms.

The constitutional amendment proposed in Minnesota for the purpose of raising the professional standard of the county superintendency has already been mentioned. Coincident with this proposition are increases of 25 and 50 per cent in the minimum scale, with authority to any county board to fix the salary at more than $2,000 if they so determine.

A substantial increase is reported from Nebraska also, and in that State the minimum in any county with 1,500 children of school age is $1,000, with higher salaries in more populous counties; counties with 15,000 or more children must pay at least $2,200.

An increase is contemplated in Utah, but in this case the method adopted was to raise the legal maximum, that being fixed at $2,000 in counties of the first class, and at from $500 to $1,500 in the less populous counties. As in other States, these increased salaries are accompanied by raised professional qualifications.

In West Virginia $200 per annum has been added to the salary of each county superintendent, and there, also, the standard of qualifications is raised.

The new code of Pennsylvania provides for the payment to county superintendents of not less than $1,500 and not over $2,000 by the State, and authorizes the respective counties to increase those amounts from county school funds. Assistants are provided in the more populous counties at $1,200 from State funds, with like authority for additional compensation from county funds.

In North Dakota the basis of compensation is changed from the number of teachers to the assessed valuation, and the maximum is fixed at $2,000 for counties with an assessment of over $9,000,000, the minimum in any county being $500.

In some of the Southern States, also, action has been taken toward the improvement of the status of the county superintendents, though naturally the rates of compensation are lower in that section. In Georgia at least $450 a year must be paid to these officers as salary and $150 for travel. In Arkansas their compensation has been increased by allowing them to retain certain fees, and in South Carolina the code which failed to pass provided for salaries of $1,200.

In New Jersey the uniform salary of all county superintendents is $2,000, the entire sum being paid by the State. A bill to increase this to $3,000 failed, but another bill did pass which requires the proper county officers to appropriate not over $600 annually for clerical assistance. Like provision for assistance, though not necessarily of equal amount, has marked the legislation of several of the States, including Indiana, Michigan, Minnesota, and Oklahoma.

A noteworthy law which should be mentioned in connection with the general subject of county supervision is that of Oregon, which provides that in each county containing more than 60 school districts the county superintendent shall appoint a county educational board, who, in turn, shall divide the county into supervision districts containing from 20 to 50 schools and shall employ a supervisor for each at not less than $1,000 per annum, such supervisors to act under the direction of the county superintendent.

SCHOOL FINANCE.

A bill of 16 lines, unobtrusive in appearance and modest in phraseology, was introduced in the Massachusetts General Court in January, 1911, which, if it becomes a law, will cause the greatest change in educational practices and the most complete reversal of traditions that have ever been witnessed in any State of the Union. It is entitled "An act to provide that the expense of maintaining the primary, grammar, and high schools in the cities and towns of the Commonwealth shall be borne by the Commonwealth." The body of the bill contained but little more than was included in the title, except that it provided that the expense should be assessed upon the respective cities and towns as a State tax, upon the basis of taxable valuation of real and personal property. The measure, revolutionary as it was, accompanied a petition of the mayor of the city of Everett and others, and was "reported" by the house committee on education. And this was in a State so wedded to local self-government that not even the qualifications of a teacher for a certificate are prescribed by State authority.

The bill did not pass, but a "resolve" was adopted directing the State board of education to investigate the prevailing methods of distribution between the local communities and the Commonwealth of the cost of public education and to report thereon with recom-

mendations as to such changes as seem to be demanded in the interest of economy and sound educational policy.

There is now no State school tax in Massachusetts, and appropriations from general funds for certain specific purposes amount to only about $250,000. The cities and towns raise over $18,000,000, and the contribution of the State is a negligible quantity in actual amount, although the use made of it is such that it exerts an influence far beyond its cash value. It is more than probable that the bill mentioned, extreme though it was, may, by causing an examination of the entire question and by stimulating discussion, result in important modifications of the traditional policy of the State in school maintenance.

This occurrence in the most conservative of all the States in many respects is additional evidence of the tendency that is general toward a larger degree of centralization in maintenance as well as in control. Other evidences may be found in the following: The State school tax was increased from 0.6 mill to 1 mill in Nevada; a constitutional amendment was proposed for popular approval in Oklahoma extending the authority of the legislature to levy taxes to aid common schools; a special tax of 0.5 mill was levied for high schools in Utah; the appropriation in lieu of a 2-mill tax was doubled in Illinois; $250,000 was added to the usual appropriation in Alabama, and large increases are reported from practically all the States.

These increases are not all in the general distributive funds of the respective States, but in many cases they are for school buildings, supervision, consolidated schools, State graded schools, high schools, industrial training, agricultural instruction, and for other special purposes. But the result is the same—the proportion of school expense which the State bears steadily tends to increase.

Tax laws of Ohio.—The financial situation in Ohio seems to be complex and somewhat uncertain. Considering only the text of the laws passed at the session of 1911, it might appear that Ohio is an exception to the statement regarding increased State contributions to education, for the tax rate for the common school fund is fixed at 0.335 mill instead of 1 mill, as formerly. It is true that for several years there has been a strong protest from the wealthier counties in each successive legislature against the 1-mill tax, and it has narrowly escaped repeal on more than one occasion; but this particular reduction is due to a difference in the basis of assessment and is more apparent than real. It was expected that the grand list of the State on the valuation of 1910 would be approximately three times as great as before, and that a levy of 0.335 mill would produce as much as the former 1-mill tax. The actual appropriation for 1911 and 1912 for the common-school fund was at the same rate as for 1910; namely,

$2 for each enumerated youth. It transpired, however, that the rates fixed by the tax law of 1911 (known popularly as the Smith 1 per cent tax law, officially as House bill No. 186) would not produce enough by approximately $500,000 to meet the appropriations for the common school fund, irreducible debt fund, and for the higher institutions. But with the law described there was passed to meet such a contingency an "enabling act," which provides that any deficiencies that may occur shall be paid from the "general revenue fund" of the State. No loss, therefore, will occur to either of the educational funds mentioned so far as the State levy in concerned.[1]

The ultimate possibilities of the same law (House bill No. 186) concerning the proceeds of local taxes, however, seem to be more doubtful. It provides that the maximum rate of tax upon any property shall not exceed 10 mills; that the aggregate of county taxes shall not exceed 3 mills; of township taxes, 2 mills; of local school taxes, 5 mills.[2] Estimates of the several boards of each county shall be submitted to a county budget commission, and, if the aggregate of the estimates exceeds the legal maximum, the budget commission shall revise the estimates and may reduce any item thereof to bring the total within the proper limit. The maximum local tax for common schools was formerly 12 mills, but that might have been increased to 17 mills by popular vote, and additional taxes were authorized for compulsory education, manual training, special teachers, and high schools. It would seem, therefore, the new law will inevitably lessen the school revenue in some localities, whatever may be the result in the aggregate.

Permanent funds.—The permanent school funds have been the subject of legislation in several States. The creation of such a fund in Pennsylvania has been described; in Minnesota an amendment to the constitution has been proposed to authorize the loaning of school funds on improved farm lands. In New York the county loan commissioners are abolished and complete control of the education fund is vested in the State comptroller. In Kansas, Missouri, Oregon, and Vermont, also, laws were passed relating to such funds, but they were of less general importance.

Apportionment of State funds.—The distribution of State school moneys will probably always be a bone of contention in some portion of the educational field. The very principle of State taxation, requiring the stronger half of a State to aid the weaker half, is attacked frequently and vigorously; and, until human nature reaches a very much higher state of perfection, injustice will be claimed in any plan of distribution that brings to any community less than it might receive under some other plan. It is generally easy to support one's interest in any legitimate cause with substantial argu-

[1] Letter from Hon. A. B. Beatty, deputy auditor of state of Ohio, dated October 3, 1911.
[2] Additional tax may be levied by popular vote and also for sinking fund and interest.

ments, and it may be expected that from time to time some legislature will be led to see the error of the previous way, whatever that way may have been.

The plan of collecting a State school tax on the basis of wealth and distributing it on the basis of school population was at one time considered generally to be equitable and proper, and school population is still the basis of distribution, wholly or in part, in 32 of the States. Dissatisfaction with this basis has become more pronounced, however, within the past few years, finding expression in school reports, in the educational press, and in at least one ably written monograph. The effect has already appeared in legislation, in Missouri and California most conspicuously. In both States the element of school population has been wholly eliminated in the apportionment. The former Missouri law considered no other factor, and the change in that State is complete, the new basis relating, first, to the number of teachers employed, and, second, to the total number of days' attendance of all pupils in the several counties. In California the old plan was to distribute, first, $250 to each district containing 70 census children or fraction of that number and $250 for each additional 70 census children or fraction thereof; and, second, the moneys remaining were divided on the basis of average daily attendance. According to the plan of 1911, however, "35 children in average daily attendance" is substituted as the unit of the first calculation instead of "70 census children." The school-census law was repealed in toto.

In Nevada an extensive change was made, but the reasons for it differed from those that actuated the legislators of the two States just mentioned. In Nevada the State money was formerly apportioned to the counties in proportion to the school population, and was divided between the districts in the counties in a different manner. It happened, in consequence, that serious inequalities resulted in the amounts received by districts of equal population in different counties, and it was principally on that account that the change was made. By the present plan the apportionment is made by the State superintendent directly to the districts. Seventy per cent of the distributive fund is allotted to the districts, nominally on the basis of teachers, but in reality on the basis of school population, for in the calculation one teacher is allowed for each 30 census children or fraction thereof. The remaining 30 per cent is distributed directly in proportion to school population.

In Idaho a new plan is in use for the distribution within the counties, but the school population is retained as the only factor in making the allotment from the State to the counties. The new "Idaho plan" has attracted wide attention and is as follows: Two-thirds of the whole amount is apportioned by the county superintendent among the several districts in proportion to their respective

school population, considering each district to contain at least 20 children; 5 per cent of the remaining one-third, or as much thereof as may be needed, is apportioned among the rural high-school districts in proportion to the number of regular high-school teachers, but not over $300 shall be apportioned for any teacher; 50 per cent of the remainder, if so much is required, is used to aid certain weak districts; the balance remaining is apportioned to the several districts in proportion to the number of census children.

One of the relics of a bygone age eliminated by the Pennsylvania Code commission was the use of the "number of taxables" as a basis of distributing the State appropriation. This factor was peculiar to Pennsylvania, and at one time was the sole basis, but latterly the number of paid teachers and the school population were made of equal weight with it. Now only the two last named remain, and half the fund is distributed to the districts upon the basis of each.

The time and frequency of the State apportionments are often matters of concern to local officers. Unnecessary delay is largely prevented in many of the States by legally prescribing the exact dates upon which the proceeds from certain taxes shall be distributed, but such provisions do not meet all conditions. The investigating committee of the New Jersey Senate, to which reference has been made heretofore, found that in many instances serious difficulties had resulted to local authorities from undue delay in distribution, together with the operation of the statutes which prevent the use of money in one fund for purposes for which another fund is provided by law. Districts in some cases had considerable balances to their favor in certain funds deposited in banks, but in need of moneys due from the State they were compelled to borrow money that was actually their own and to pay the banks for the use of it. To avoid such inconvenience and expense, a bill was proposed and passed providing that receipts from taxes levied in any year shall be distributed on the following September 1, later collections being distributed October 25 and thereafter as frequently as the collections shall amount to $5,000.

With a similar purpose in view a law was enacted in Washington providing for six apportionments a year, all moneys available being distributed each time.

Aid to weak districts.—Further extension is noted in the practice which has found favor in many States of granting special aid to districts so weak that they can not maintain schools for the required time with the proceeds of the maximum tax authorized by law. Idaho, Kansas, and New Mexico were added during the year under review to the list of States in which such provision is made. The provision occurred in Idaho as a part of the general plan of distribution, as described in a preceding paragraph, but in Kansas it was an important portion of a new law relating to the minimum term of district schools.

By this act if a district can not provide seven months' school with all the funds available the State is obligated to contribute three-fourths the deficiency and the county is required to pay the remaining one-fourth. New Mexico goes further and makes such provision a constitutional matter; before the State funds are distributed each year a sufficient sum must be reserved to enable all weak districts to maintain school for the full period prescribed by the constitution—namely, five months. In Oklahoma steps were taken in the same direction by proposing a constitutional amendment to authorize the State to apportion to any such weak district the amount necessary to enable it to maintain school for five months.

In several of the States in which specific appropriations are customarily made for this purpose the amounts were increased during the year. In New Hampshire the increase was from $80,000 to $115,000; in Maine from $20,000 to $27,000; in South Carolina from $20,000 to $60,000, etc. On the contrary, the corresponding appropriation in Ohio was reduced from $50,000 to $19,000, and a bill which passed the Colorado Legislature providing for an emergency fund of $20,000 to be used by the State superintendent for a similar purpose was vetoed by the governor.

There is an intimate relation between such appropriations and the levy of a State school tax, and this relation is not overlooked in legislative debates. Any general discussion of the one necessarily involves the other both in principle and practice.

School bonds.—School district bonds fill a large place in nearly all codes; they consume much of the time of legislatures, and they are the cause of more litigation than any other single phase of the schools' interests. In some of the States every bond issue of any amount must be separately authorized by the legislature, but in the majority general laws authorize districts to issue bonds for specified purposes, in prescribed ways, and in limited amounts. These provisions are in many cases written in great detail, and their complexity frequently leads to misunderstanding and failure to observe essential requirements, which omissions must be remedied by special enactments or by judicial decisions. In some of the States whose constitutions forbid special laws, great ingenuity is often shown in describing a particular district in general terms, so that an act to validate an informal bond issue already effected will not open a way for future abuses. Such laws were, as usual, conspicuous in the proceedings of several of the legislatures during the past year.

Some general laws of interest were also passed, that of Tennessee being especially noteworthy, for there was previously no authority in law for the issue of bonds for the construction of schoolhouses, and the new law supplies this need. A similar condition continues to exist in Florida and the effort to remedy it failed to accomplish the desired result during the reeent session.

The abuses discovered by the senatorial investigating committee in New Jersey were in great measure connected with the issue and sale of bonds, and two laws were passed to correct the evils that were discovered. One of them restricts the sale of school bonds at private sale, and forbids the delivery of such bonds outside the State, and in any case except upon payment in cash or its equivalent. The other law requires that every coupon bond held by the trustees of the school fund shall be stamped.

In Minnesota the maximum bonded indebtedness of any district was raised from 5 to 10 per cent of its assessed valuation. Similarly, in Iowa the legal limit of indebtedness of independent districts was raised from 2½ per cent to 4 per cent of the actual value of taxable property. Presumably the difference in these percentages is due in a large measure to varying bases of assessment.

Local taxes.—In regard to local taxation for schools, comparatively few general laws have been passed recently. Next to that of Ohio, which was described in a preceding paragraph, the most important are reported from North Carolina. The compulsory county tax in that State was increased from 1.8 mills to 2 mills, and the result, with the normal increase in valuation, will be a gain to the schools of about $450,000. In addition, any county was authorized to levy a special ad valorem tax not to exceed 3 mills, and not over 90 cents on each poll.

The compulsory county tax levy was raised in Oregon also, the increase in this instance being from $7 to $8 per capita of school population.

In Nevada the minimum school tax required to be levied by the counties is increased from 1.5 to 2 mills, and district trustees are authorized to levy 2.5 mills in addition, the previous requirement for popular vote under certain conditions being omitted. These provisions are of especial significance, in connection with the increased State levy, in view of the fact that Nevada already expends more per pupil than any other State in the Union.

Important laws of limited application were enacted in other States, particularly West Virginia, Kansas, New Jersey, Minnesota, Nebraska, and Wisconsin.

DISTRICT, TOWNSHIP, AND MUNICIPAL OFFICERS.

The usual grist of local laws has been delivered by the several legislatures, but few of the many bills possess general significance. The tendency to smaller school boards in cities is still evident. In Kansas all cities of the first and second classes, except Wichita, will hereafter have school boards of six members only, elected by the voters at large, for four-year terms, three terms expiring every odd year. Heretofore two or three members were elected from each city ward.

In New Jersey the boards of education in all cities are reduced from nine to seven members each. The school board of Terre Haute, Ind., has been reduced to five trustees, each to receive $500 per annum.

The court of common pleas occupies a prominent place in the Pennsylvania school code, and important duties are assigned to its judges in several situations which demand conservatism, unbiased judgment, and intimate knowledge of local conditions. Under the old law the members of the board of education of Philadelphia were appointed by the judges of this court, and now the same method of choice is extended to "cities of the first class," which includes Pittsburgh as well as Philadelphia. The number of members of the boards in these cities is reduced to 15, but in order to furnish the element of local participation to a greater degree than would be possible with a small appointed body, boards of school visitors are provided for each ward, to be elected by popular vote. In all districts of Pennsylvania excepting the two cities named, the directors are elected at large by popular vote; the full terms are six years, about one-third of them expiring every two years. The number of directors varies from five to nine according to the population of the district.

The duties of superintendents and the terms of their employment have received attention in several of the States. In Montana and North Dakota cities may contract with their superintendents for periods as long as three years, which is an extension of the time previously specified.

In four of the six New England States there has been during the year important legislation relating to superintendents. The conditions of supervision in that section are unique. The county does not exist for school purposes, and of course county supervision is not included in the plan of public education. The cities and many of the stronger towns (or townships) have long employed superintendents, but in the weaker towns there was in the past no professional oversight of the schools. Recent legislatures by successive enactments have sought to induce such towns to unite for the purpose of employing superintendents, and reasonable progress has been made. In Massachusetts the law already in force required the formation of such unions under the direction of the board of education, and in that State effort is now directed to perfecting rather than extending the system. Three bills to this end were drawn by the State board during the year, and all became laws.

The first related to the term of office of superintendents, that being fixed uniformly at three years, but authority to remove was given to the joint committee subject to the approval of the State board of education. The second was designed to promote the permanency of unions by repealing the former three-year limitation and by making the consent of the board of education necessary to dissolution. The

third bill contained the first legal definition of the status and duties of a school superintendent that has ever appeared upon the statute books of Massachusetts, although the idea of supervision as it now prevails had its first application in New England.[1] It is plain from the diversity of practice described by the State commissioner of education that the need of such a law was great.

In Connecticut, Maine, and Vermont additional laws were enacted to facilitate the formation of unions and the employment of superintendents.

ADMINISTRATIVE UNITS.

The "school wagon" has had profound influence upon rural school organization and conditions whose extent it is already difficult to estimate, and it is evident that that influence has scarcely more than had its beginning.

The consolidation of schools leads ultimately, if not immediately, to consolidation of districts. The previous organization is not necessarily abandoned when a small school is discontinued, and it often, if not usually, happens that the small districts are continued for a time. But with their purpose gone, there is no reason for their existence, and complete consolidation is the logical outcome.

The tendency in legislation is toward immediate dissolution of the component districts when consolidation is effected, but it is not always so; and in many States the trustees of a small school may of their own motion close that school and transport the children to a school in an adjoining district after making an arrangement to that end with the trustees of the other district. Laws were recently passed in Illinois, Minnesota, and Wisconsin authorizing such action, and in none of these cases would there be, of necessity, any change in organization. The Wisconsin law provides additional State aid to each district which thus closes its school, and requires a high standard in the school to which the children are sent.

On the contrary, complete reorganization is contemplated by laws passed during the year in Oklahoma, Georgia, Kansas, Minnesota, and by another act in Wisconsin. All these require that free transportation shall be furnished to all children living more than a specified distance from the schoolhouse.

The laws mentioned for the two last-named States are of more than usual importance. The consolidated districts of the new type in Minnesota must comprise not less than 18 sections, and may include territory in more than one county. Instruction in agriculture, manual training, and domestic science is contemplated, and a high standard of buildings, teachers, and equipment is required. The school boards of such districts must provide transportation for all pupils living

[1] Nathan Bishop was superintendent of schools in Providence, R. I., from 1839 to 1851, and went to Boston in the same capacity at the latter date.

more than 2 miles from the school, or in lieu of such transportation they may make reasonable provision for room and board for pupils whose attendance can be more economically and conveniently secured by such means. State aid varying from $750 to $1,500 is offered to such schools, and, in addition, aid not exceeding $1,500 is offered for the construction of the building.

The second of the new Wisconsin laws mentioned binds the State to pay not over 10 cents a day for each child transported in a consolidated district, provided the child shall attend school regularly for at least six months.[1]

Consolidation has appeared also in other phases in the enactments of the year. In Iowa and Texas the formation of "county-line" districts was authorized by the union of districts in different counties, and in California and Kansas additional laws were passed to facilitate the annexation of suburban districts to city organizations.

The township system of organization may be expected to have a place every year in the legislation of some State, and this time it appears in Indiana and Wisconsin. In the former State any incorporated town not exceeding 1,500 inhabitants is authorized to discontinue its school board and transfer its school property to the proper township trustee, entering the township system. In Wisconsin, where the township system has been in limited use, that plan of organization was definitely abolished by the act of June 22, 1911. It is stated that so many abuses and defects were connected with the practical administration of the system in Wisconsin that the only remedy was to completely reorganize the plan of control of schools thus governed. Nevertheless, by another law in the same State, the county supervisors may organize school districts containing more than 36 square miles, the area covered by a congressional township.

SCHOOLHOUSES.

In the legislation of the year concerning schoolhouses two enactments stand conspicuously above all the rest, namely, the building code of Ohio and the sanitary schoolhouse law of Indiana. The former is the more comprehensive, and, as its name indicates, it covers all classes of construction. "School buildings," however, comprise an important part of it, and under that head are included all structures which contain one or more rooms used for the assembling of persons for the purpose of acquiring knowledge or for mental training. Not only schools, colleges, and seminaries, but libraries, museums, and art galleries are within this definition.

The provisions of the statute are minute, and regulate the details of construction, materials, precautions against fire and panic, size

[1] The question of transportation not involving changes in district organization is further discussed on a subsequent page (p. 106).

of rooms, air space, ventilation, lighting, heating, sanitation, and nearly everything else that has been included in the most advanced laws of the kind within recent years. The provisions seem to be in full accord with the most approved practices, and few omissions are apparent; one of the most important omissions is that no requirement is made as to the proportion of moisture in the air supplied to schoolrooms. Other details of the same sort are covered with great care, and it is likely that the failure to include this item was due to a mere oversight. As this is a "building code," it naturally relates to construction primarily, and does not include many of the usual requirements concerning sanitation in operation of the school plant.

The Indiana law, on the contrary, is concerned largely with the sanitation of operation. It contains little that touches structural features proper and nothing at all that relates to fire protection; but with respect to the subject matter that it does cover it is exceedingly minute in requirement and rigid in provision for enforcement. One of its clauses may even provoke a smile because of its novelty and ingenuity, namely, "Any money claim for the material entering into or any money claim for the construction of any schoolhouse which does not in every way and in all respects comply with the requirements of this act shall be null and void." The eagerness with which architects and builders will study the statute, in view of this provision, may be imagined.

In addition to matters of location, lighting, seating, heating, ventilation, sanitary arrangements and the like, there is much in the law that concerns not the school building but the pupils and their condition of health, and the statute is in reality almost as much a medical inspection measure as a schoolhouse law.

These two measures deserve prominence because of their comprehensiveness, minuteness, and adherence to accepted standards, but they are by no means alone in the field. An excellent law was enacted in North Dakota, bearing many of the characteristics of both the Ohio and the Indiana laws, for it includes provisions that relate to structure, fire protection, sanitation, and inspection, all in the same statute. Stringent and specific laws requiring fire escapes have been put on the statute books of Michigan, New Jersey, Wisconsin, Kansas, and Iowa, and it is clear that the terrible lessons of the Collinwood School and the Iroquois Theater still have their effect, for in this respect schoolhouses are usually coupled with other classes of buildings in which numbers of people are accustomed to congregate.

The use of schoolhouses as social centers is widely extending, not only in the cities, but in the rural districts as well. Perhaps the movement to this end is even more pronounced in the country, for it is an essential factor in the "rural uplift." General permissive legislation recognizing this movement, appeared in two of the States

in 1911, namely, Massachusetts and Wisconsin, and in Missouri the boards of education of Kansas City and St. Joseph were authorized to erect and maintain auditoriums suitable for public gatherings.

The extent of this movement must not be judged, of course, by these three laws alone, for it must be understood that many others of the same sort have preceded them.

TEACHERS.

EXAMINATION AND CERTIFICATION.

No other single subject relating to education has occupied as much of the attention of State school officers and of legislators during 1911 as the problem of teachers' certificates. Scarcely a State in which the general assembly has met has failed to produce some contribution to the aggregate of legislation concerning this most important subject. Conferences of State superintendents of the West and Middle West were held at Lincoln, Nebr., Salt Lake City, Utah, and Topeka, Kans., to consider the matter, and discussions in the press and in educational meetings generally have served to keep the subject in the forefront. The primary object in view is the elevation of standards; and as tending to this end, as well as to conduce to the convenience of school officers and teachers alike, it is sought to establish uniformity of practice, with proper recognition of certificates of other States and due credit for diplomas of normal schools, colleges, and universities.

The legislatures have as a rule responded cordially to the recommendations of school officers, and gratifying progress has been made toward the elevation of standards and interstate cooperation and reciprocity. The outlook is promising for still further improvement in both respects.

The most gratifying fact in this connection is that the diffusion of popular education has reached such a point as to make these measures possible. The number of cases in which relaxation of standards is necessary are very few, and are confined to sparsely settled rural districts. These exist in nearly all the States, and probably will continue to exist in gradually decreasing numbers for another generation at least.

It is difficult for one surrounded by the comforts and conveniences of a prosperous community to realize the hardships of school work on the western deserts and in some of the mountain districts of any section. Even yet in exceptional cases dwellings are miles apart; communication with the outside world is at a minimum; the average of intelligence and culture is low; comfortable quarters and even wholesome food are not easily found; and existence itself involves

a struggle. Add to these discouraging circumstances the difficulty of raising enough money by ordinary means in such districts to pay the salaries proposed, and it may be easily understood that it is difficult to induce teachers with even the minimum of the prescribed qualifications to accept such positions.

In order, therefore, to provide some measure of instruction for children so disadvantageously situated, the statutes of most of the States vest in some officer the authority to relax the strictness of the general law at proper times. Such a provision was recently inserted in the Nebraska Code after an exhaustive investigation of the schools in the least-favored portions of the western part of the State. Similar action was taken also in Nevada, Washington, and West Virginia.

Under normal conditions, however, it is now possible to maintain a teaching standard that is reasonably satisfactory and to enforce laws that would have been impossible even 10 years ago, so rapidly has the improvement progressed.

Experience has shown that on the whole the best results are reached with centralization in the matter of certificating teachers. Formerly the county superintendents or other local officers were usually charged with that duty, but the results were not satisfactory. The certificates were not all of equal value, and the credentials of one county could not be utilized in another. An attempt was made to remedy the evil by causing the questions for all examinations to be prepared by a central agency, generally in the office of the State superintendent. This was an improvement, but it was still not sufficient, for the grading of the papers was done according to varying ideals of perfection. The plan now generally accepted as the most efficient is to place the entire matter in the control of State officers, either the board of education, the superintendent of public instruction, or a board of examiners under the supervision of the State superintendent. By this plan the questions are prepared by the central authority and are forwarded to the proper county superintendent. The papers are written in the presence of that officer and are then forwarded to the central authority and duly rated. Successful applicants receive appropriate certificates signed by State officers, and may teach in the grades or schools specified in any county in which their certificates are properly registered.

Substantially this plan is followed in many of the States, and during the year it was adopted in Oregon, Missouri, Georgia, Texas, New Hampshire, Nevada, and North Dakota, and in Massachusetts so far as State-aided high schools are concerned.

As a rule the proper officers of the larger cities are allowed to make their own rules for examination and certification, but in Nebraska the cities as well as the counties were brought under the rules of the State superintendent by the act of April 8, 1911. That officer has

provided for a special series of certificates for the cities, and is now in practical control of the entire business of certification in the State.

"Building" certificates.—Professional improvement of the teacher and his progress from one grade of certificate to a higher grade is always encouraged, and several recent laws have been enacted to facilitate such progress. It is recognized that periodical tests in the common branches do not constitute the best means of insuring professional development, and that a teacher who has passed a satisfactory examination in a given branch and has been in active educational work since may be expected to have continued proficient in that branch. It is considered preferable, therefore, to encourage teachers to take up new studies and to "build" to higher certificates by passing in additional branches rather than to repeat previous work. This idea is prominent in new certificate laws in Iowa, Texas, and to a less extent in Kansas, and there is little doubt that it will be a feature in the systems of other States in the future.

Minimum qualifications.—Practical considerations must always control any scheme for improvement, and in prescribing minimum qualifications it is always necessary to draw the line at a point high enough to insure a degree of preparation that will guarantee effective instruction of the grade required, but not so high as to make it impossible to man all the schools. Consequently in very few of the States has the attempt been made to prescribe the exact point in a standard course of study which an individual must reach in order to be eligible to teach. But it is now thought by many that the time has come for such provisions, and in Kansas it has been enacted that after May 1, 1917, no teacher's certificate shall be granted to any person who has not completed the full four years' high-school course or its equivalent. In the meantime the standard will be raised gradually to that point.

In Missouri a similar requirement was made with reference to first and second grade county certificates, the date fixed being September 1, 1918, but the requirement does not apply to certificates of the third grade. The effect of the law, therefore, will be peculiar: A third-grade certificate may be issued to an individual four successive years but no more; at the end of that time he must retire from the service if he has not had a full high-school course, for there is no kind of certificate for which he will be eligible; but another applicant with no more preparation and wholly without experience may obtain the certificate and teach the school which can not be given to the experienced teacher. This situation will not arise for several years, however, and in the meantime there will be ample opportunity for any change that may be considered advisable.

Additional subjects.—The laws described in the foregoing paragraphs are expressions of the general tendency to higher standards, and that tendency is variously shown in other States. In Alabama

all applicants for certificates must be examined upon the theory and practice of teaching, United States history, and civics; in Michigan the school law of the State and the State course of study for district schools are added subjects; in Ohio elementary agriculture is made a required subject for elementary-school certificates; in Texas the third-grade county certificate is discontinued.

Recognition of diplomas.—In the matter of recognition of diplomas of institutions and of certificates of other States the following enactments deserve attention: In Iowa certificates validated by the State board of examiners are valid for five years. In Kansas the State board of education must prepare an accredited list of standard colleges and universities, either within or without the State, maintaining a department of education; and each graduate of an approved course of an institution upon that list will, upon application, receive a State certificate valid three years, which may be extended for life after two years' successful experience. In Montana certificates are granted to graduates of the State university upon specified conditions. In Oregon graduates of standard institutions who have studied education for 15 semester hours may receive certificates without examination; the standardization (or classification) of institutions must be that of the United States Bureau of Education, or in the absence of such action, that of a specially constituted State board. Credits obtained upon examination by State authorities of another State may be accepted for equivalent certificates in Oregon. In Pennsylvania the State superintendent may validate life certificates of other States. In Texas the holder of a life certificate of another State may receive a State permanent certificate, and appropriate provision is made for graduates of standard normal schools and of other higher institutions. In Vermont the State superintendent may grant five-year certificates to graduates of approved normal schools of other States. In Washington the results of State examinations elsewhere may be accepted subject for subject by the State board of education.

SALARIES.

The final success of the prolonged struggle of the women teachers of New York City for "equal pay for equal work" is the most interesting and significant event of the year in legislation relating to salaries. For nearly 50 years compensation determined not by sex but by the service rendered has been the object of almost constant agitation, and in the past 10 years efforts have been particularly active. Five successive legislatures dealt with the problem without result, but October, 1911, witnessed the passage of the bill that finally settled the controversy and in favor of the women. The right of the board of education to fix the salaries of teachers is not abridged, except by the express stipulation that no discrimination shall be made on account of sex.

It is to be expected that men will continue to predominate in the higher positions and women in the lower, and that the average salary of men will be considerably above that of women. But schedules like that in which male principals receive $1,000 a year more than female principals of equal rank will no longer be seen in New York City.

Similar in some respects was the campaign waged by the teachers of elementary schools in Boston, for the agitation was conducted principally by and for women, although there was no direct controversy over the question of sex discrimination. Early in the session of the general court the passage of a bill was secured which required that 10 cents of the school-tax levy of $3.70 in Boston be devoted to increasing the salaries of teachers in elementary schools. The bill failed to meet the approval of the governor, and his veto was sustained by a close vote. The opposition was based largely upon the argument that the measure involved unwarranted interference with the principle of home rule, and that it unduly favored one class of teachers. Undaunted, the teachers interested set themselves to the task of framing a bill free from objection that would accomplish their purpose. Like their sisters of the metropolis, they succeeded, and a substantial increase in their salaries will result.

Less spectacular but perhaps more important in the aggregate was the legislation in Pennsylvania on the salary question. There the minimum salary that may be paid to any public school teacher was raised from $40 to $45, and the minimum that may be paid to any such teacher who has taught successfully for two years was fixed at $55, instead of $50 as formerly. The State is obligated to pay the difference between the salaries paid in 1906 and the prescribed minimum, and this provision involves an additional appropriation.

In Indiana, also, an important increase is noted; the minimum daily wage of teachers exempt from examination is raised one-sixth. The manner in which this is done is a part of a unique plan of determining salaries, which, like many other Indiana laws, is distinctly ingenious. The salary of such a teacher must be at least 3½ cents (instead of 3 cents) a day, multiplied by the general average of scholarship and success given to that teacher. The "grade of scholarship" is that attained in the teacher's last examination and the "grade of success" is that given for the teacher's term last preceding the date of his contract. No explanation is required to disclose the purpose of this arrangement.

No State aid may hereafter be granted to any school in Wisconsin for instruction given in agriculture, domestic economy, manual training, or industrial branches unless the salary paid to every teacher of such subjects be at least $60 per month. These subjects are prominent in the Wisconsin school system, and their importance is increasing with the growth of the county agricultural high schools and like

institutions. The new provision, therefore, is of especial significance in that State.

PENSIONS.

With each succeeding year it becomes more apparent that the superannuation of teachers past the period of usefulness is destined to become an essential feature of the American school system. The period of inquiry and experiment is rapidly passing, and the laws of 1911 disclose a degree of uniformity which indicates that the lessons of the past have been heeded, and the disposition is manifest to place the matter upon a basis of permanence and effectiveness.

It has become apparent that salary deductions within any reasonable limit are not sufficient to maintain a retirement fund, and that contributions and receipts from fairs and picnics are too uncertain to form the basis of an enduring system. The logical solution is that the same authority that pays the salaries must pay the pensions, and the tendencies of the time are all in that direction. It is inevitable that a period must be passed in which a part of the cost will be met by a general reduction of salaries in the form of assessments; perhaps popular sentiment demands it. In the end, however, it must be seen that the so-called assessments are an empty formality; the schedules may be readjusted, perhaps, to meet the new conditions, but there is no doubt that annuities will be finally paid generally from public funds. This condition has already been fully reached in Rhode Island and Maryland, and in New York in State institutions, while the same statement is true of New Jersey in relation to one of its two parallel pension systems. Both Virginia and New York, in its general law, now closely approximate the same condition, but in those States the formality of deduction is still maintained.

The most important legislation of the year in this connection was in New York, Wisconsin, Ohio, Pennsylvania, and Vermont, but other enactments, named below, are of significance in less degree only because they are less general in their scope.

New York formerly had a general pension law, but it was not practicable and was omitted in the revision of the school code of 1910. The law of June 26, 1911, however, seems to be thoroughly workable and provides a State system that should be effective. Counties, districts, and cities in which local retirement funds are in operation are exempted from the provisions of the law, but such localities may be brought within the State system if two-thirds the teachers concerned so desire. A State teachers' retirement fund board is constituted to administer the fund, and the necessary moneys are to be derived principally from salary deductions of 1 per cent, which are retained from the State apportionment, and from appropriations to be made by the State legislature. Annuities are limited to $600 per annum.

The "teachers' insurance and retirement fund law" of Wisconsin is a combination of features that exist in other laws, but as a whole it differs from all the rest, though it closely approaches the New York measure. It provides a State system, with a board of control consisting of the State treasurer, the superintendent of public instruction, and three elected members, one of whom must be a woman. Ten cents per capita of the school population of the State must be reserved from the State school tax for the pension fund and teachers must contribute to it 1 per cent of their salaries during the first 10 years of service and 2 per cent thereafter. Teachers already in service may accept the provisions of the law or not, at their option, but those who enter the profession after September 1, 1911, accept its provisions in accepting appointment. Annuities will amount to $12.50 for each year of service, the maximum being $450. Since there is already a retirement fund in Milwaukee, that city is excepted from the law.

Ohio.—The Ohio pension system is still essentially local, and the several boards of education may establish retirement funds at their option. This State, therefore, is not to be classed with either of those mentioned in the foregoing paragraphs in the breadth of its legal provisions, but with the new law in effect (house bill No. 142, approved June 13, 1911) the local funds appear to be upon a permanent and satisfactory basis. It was required previously that not less than 1 nor more than 2 per cent of the gross receipts from taxation of the proper board of education should be applied to pensions, but the participation of teachers was optional with themselves. The present law, however, provides that all new teachers shall accept the provisions of the pension law and that their contracts shall include such acceptance. Teachers already in the service may still exercise their option in the matter.

It is hoped that the obligatory clause as it is now drawn will stand the test of the courts, since it becomes a matter of contract; but it must be said that the courts of Ohio have in the past pursued a line of reasoning opposed to compulsion, and there is still a possibility that this provision, common to nearly all the effective laws upon the subject, will be declared void. In only one other State, New Jersey, has the question been at issue before the courts and in that case (Allen *v.* Board of Education of Passaic, Feb. 27, 1911) the decision emphatically upheld the law.

Pennsylvania.—The Pennsylvania Code of 1911 contains the first general provision in that State for pensions. Previously there were permissive laws for Philadelphia, for cities of the second and third classes, and possibly for certain other localities by special act, but there was no law of general effect. The new code authorizes the

board of directors of any district to establish a retirement fund, to appropriate public moneys therefor, and to provide in the contracts with its teachers that they shall contribute a reasonable sum from their salaries each year to said retirement fund. As may be seen, this law is much less definite than that of Ohio, but it is in the same direction and, considering what had gone before, it is as much a step in advance as the other.

Vermont.—The Vermont Legislature in January, 1911, authorized any town or incorporated district to vote a pension from school funds for any teacher who has taught for more than 30 years. No reduction in the salaries of those still in service is required, and no elaborate machinery is provided. If the voters at town meeting see fit to do so, they will vote to pension certain teachers as they vote other expenditures; that is all. Such is the simplicity of local government in New England.

Illinois.—There has been a retirement fund in Chicago for several years, and in the beginning participation was compulsory upon all teachers. That plan, however, did not appeal to many, and when petitioned to do so the legislature withdrew the compulsory clause. There was no contribution from public funds at first, but later it was provided that the interest on deposits of school moneys should be devoted to the retirement fund. And now, by the act of June 5, 1911, the board of education of the city is required to contribute an amount equal to the aggregate of deductions from teachers' salaries for the fund. Naturally, this additional help from public funds will make participation more desirable, and the teachers who have not previously elected to come within the provisions are allowed by a new act another opportunity to do so. The law is still essentially optional in its terms, however.

With the exception of Chicago there has been no provision for retirement in Illinois until the past legislative session. An act was passed (June 6, 1911) which authorizes the board of education of any district having between 1,000 and 100,000 inhabitants to establish and maintain a retirement fund upon an assessment basis. Further, in its last section, it permits any school district in which there is not sufficient revenue to maintain a pension fund under the preceding sections to pension from public funds any teacher over 50 years old who has faithfully served the district for 25 years. This action must be by majority vote of the district.

The terms of this section do not require that the assessment system shall be first attempted; it seems only to be necessary that it be shown that the funds that can be thus raised will not be sufficient. In many cases this will be immediately apparent; for a district of 1,000 inhabitants would scarcely have a dozen teachers and the assessments on their salaries would not pay a single pension. If

there is doubt in any other case, an investigation of the history of assessment experiments elsewhere will show that the provisions of the first portion of the law are wholly inadequate. The Illinois pension law of June 6, 1911, therefore, actually and generally authorizes teachers' pensions from public funds, although that fact may not yet be realized. Perhaps it was not so understood by its promoters at the time of its passage, for the assessment provisions are similar to those of many other retirement bills that have been enacted with the utmost gravity and in good faith.

Kansas.—The creation of a retirement fund by the board of education of any city of the first class was authorized in Kansas by the act of March 14, 1911. This applies to the six cities of the State which contain over 15,000 inhabitants. The necessary moneys are to be derived from salary deductions of not less than 1 nor more than 1½ per cent and from appropriations from school funds which shall be not less than 1½ times the amount of salary assessments and not less than the amount necessary to meet the payments provided for in the law. This constitutes a general guarantee of the payment of the pensions granted and is far more effective than to specify a certain proportion of the school funds or a certain amount that must, or may, be contributed by the school authorities. Another commendable feature is the clause which stipulates that a teacher going from one city to another in the State shall lose thereby none of his right of retirement. Any teacher is allowed the option of exemption from the provisions of the law, but its terms are so favorable that it is not to be expected that any one will desire such exemption if he contemplates teaching as a life work.

Other laws concerning pensions.—The State board of education of Massachusetts has been instructed by the legislature to investigate the advisability of paying a retirement allowance to any teacher who has taught 35 years. There is already a permissive statute in force applying to all towns and cities in the Commonwealth, and a different law requires the school committee of Boston to provide a pension fund. The "resolve" mentioned above, therefore, seems to contemplate the beginning of a State, rather than a local, system.

The New Jersey law requiring local authorities to retire applicants who have served 35 years has been amended so that 15 years of that service may have been in any State; 20 years, however, must have been under the board of education granting the pension.

In Minnesota, retirement associations may be formed under city auspices in cities of over 10,000 inhabitants, the limit having been reduced from 50,000 by the legislature of 1911.

Local pension systems were authorized in 1911 in Wilmington, Del., and Portland, Oreg. In the first named the city council must appropriate at least $2,000 annually, and in the second city the board

of school directors must contribute a sum equal to 1 per cent of the amount received by the district as its portion of the county school tax. Assessments, of course, are contemplated in both cases.

NORMAL SCHOOLS.

The former inclination to multiply the number of State normal schools has waned perceptibly. Efforts were made in many of the States to strengthen and raise the standard of the schools already in existence, but only two new ones were established during 1911, namely, one in Maine and one in California. The two new schools for which appropriation was made in Ohio last year were located at Kent and Bowling Green, and the legislature of 1911 authorized the construction of buildings worth $250,000 for each of them. The Normal College of Mississippi, for which provision was made in 1910, was located at Hattiesburg after lively bidding by localities, and preparations have been made for construction. These are the important events of the year that relate to new schools.

On the other hand, legislation for normal schools already established has been fairly active. Of the three so-called State normal schools of Vermont, the one at Randolph Center has been discontinued and its buildings utilized for an agricultural school; the other two, at Johnson and Castleton, respectively, have been taken over by the State and will be conducted in future as State institutions in the full sense of the term, with a higher standard of scholarship.

Somewhat similar action was taken in Alabama, where the control of all the State normal schools for white students was consolidated in a single board of trustees, with a view to making them actually State institutions rather than local schools. The State appropriation for them was materially increased at the same time.

The provisions of the Pennsylvania Code with the same purpose in view have already been mentioned.

The situation in Oregon, which had been unsettled and unsatisfactory for several years, has apparently reached a definite solution. All four of the schools were entirely discontinued for a time, but one of them, at Monmouth, has been reestablished and put upon a permanent basis with an annual State tax in its favor of one twenty-fifth of a mill. It is interesting to note that this was proposed by an initiative petition, and was approved by the majority of votes cast on November 8, 1910.

There is always a possibility that State normal schools may be made so effective as to defeat the very purpose of their creation, which is to train teachers for schools outside the cities. If the training is of too high a grade the graduates can not be held in village and rural schools or even in school work at all in many cases. This consideration must necessarily limit the curriculum of the State normal

schools for a number of years—until the diffusion of education is complete; they must continue to occupy the middle ground in the field of pedagogical training. Above them, the teachers' colleges and the departments of education in the universities must train the school officers and teachers of high schools. This work is constantly extending. The principal legislative event of the year in connection with it was the elevation of the State normal school at Greeley, Colo., to the dignity of a college. This institution was made the head of the normal training system of the State, and a large appropriation was made for the extension of its equipment and facilities. Another departure that is worthy of note is the act of the Ohio Legislature, which authorized the location of a high-school building on the campus of the Ohio State University, to be used as an observation and practice school by the college of education of that university.

Normal training in high schools.—Below the normal schools, especially in view of the general elevation of standards, means are necessary for preparing teachers for rural schools of the lesser type, for the conditions are not yet ripe, as a rule, for the normal school graduate in the one-room country school. This need has been met by establishing training courses in selected high schools, well distributed. New York has long had such courses; other States have established them more recently, and the plan has grown rapdily in favor in the past few years.

Important laws providing for such high-school courses were passed during the year just past in Iowa, Vermont, and Arkansas. In the former State $25,000 was appropriated for the first year and $50,000 annually thereafter to aid the training classes, and since each school will receive not over $500 it will be seen that the benefits of the act will be sidely diffused. In Vermont provision is made for 12 classes at first, but the number may be increased to 15 in the second year. The appropriation in the new high-school laws of Arkansas for encouraging normal training in selected high schools was $10,000, and since no one school may receive more than $1,000, it is evident that at least 10 schools will be aided. The provisions of the law are well drawn, and effective training seems to be assured.

Wisconsin has maintained 26 county training schools upon this plan, but that number was increased to 30 in 1911, and additional inducements are offered for attendance in them. In Nebraska it has been found necessary to authorize the State superintendent to relax the requirements as to the designated schools in some of the western counties of the State. The conditions there are such as to make special consideration necessary.

Summer normal courses.—Below the normal courses of high schools still another means of preparation has been found desirable in some of the States, for it is yet necessary to employ persons to teach who have had even less professional training than is given in the high-

school courses. In Nebraska, for example, "junior normal schools," continuing from 6 to 8 weeks each, have been conducted for several years, and in Wisconsin the "12 weeks' courses in the theory and art of teaching" have become an established institution. The example of these States was followed in Colorado during the past year; the State was divided into six "teachers' summer normal school districts," and it was provided that in each of them a summer normal school for the instruction of teachers and those desiring to teach shall be held annually for a term of not less than 6 weeks. The schools are controlled jointly by the county superintendents in the several districts and the board of trustees of the State Normal College at Greeley. The State contributes $10,000 to their maintenance, the commissioners of each county must appropriate $2 for each person attending from their respective counties, and a registration fee is collected from each student.

TEACHERS' INSTITUTES.

The status of institutes is well determined in the majority of the States, and few new laws appear in relation to them. The most progressive step reported in this connection was taken in Alabama. The institute work in that State has been somewhat fragmentary in the past, but the legislature of 1911 appropriated $6,500 for the employment of conductors and provided for the compulsory attendance of all teachers except holders of life certificates, and for more systematic and effective management generally.

In California the county superintendent was authorized to hold in his discretion local teachers' institutes instead of the regular county nstitutes. School boards in Indiana were authorized to adjourn their schools for not exceeding three days in any year in order to allow the teachers to attend sessions of schools or institutes of agriculture, or meetings of teachers' associations, and to visit model schools; no deduction of salary shall be made for time so spent. An act was passed in Kansas to facilitate the holding of joint institutes by the less populous counties.

COMPULSORY EDUCATION.

No compulsory law that was wholly new was enacted during 1911, and the only territorial extension of the system by legislative action was in Arkansas and Tennessee, where additional counties were brought under the compulsory laws. A bill providing for a measure of compulsion failed in Florida, and the efforts of the previous year in this behalf in Georgia were not renewed because questions of general organization absorbed the attention of those concerned with educational legislation.

Important amendments, however, were made to existing laws in a number of States. Weak points frequently develop in carefully drawn measures, and new situations constantly arise, rendering minor changes necessary. But amendments that relate to compulsory attendance are usually due to advancing popular sentiment. Public opinion now demands a degree of stringency in many of the States that would not have been tolerated anywhere by the last generation, and the trend everywhere appears to be in the same direction.

The most comprehensive law of the year in this relation is reported from Minnesota, and the most important feature of it is the provision for a complete school census for the purpose of informing the several teachers and officers what children are amenable to the law. Modifications are made, too, in other particulars, all tending to add to the strength and enforceability of the law. Poverty is omitted from the list of excuses that may be accepted for nonattendance, but, in response to a general demand, children over 14 outside the large cities may be excused between April 1 and November 1 if their help is required at home.

It is usually the custom to refer to charity organizations cases in which children are prevented from attending school by lack of suitable clothing and food. A departure from this custom is reported in Michigan, where an act (No. 198, 1911) authorizes boards of education in necessitous cases to contribute directly to the support of children in order to enable them to attend school. Such aid is limited to $3 a week for any child and to $6 a week for any family. Textbooks may be supplied in addition.

The length of the period of compulsion has for several years tended to increase. During 1911 three States added a year each, namely, California, North Dakota, and Vermont, and the compulsory ages in those States are now 8 to 15, 8 to 15, and 8 to 16, respectively. In Vermont the stipulation is added that any child of 7 years of age who is enrolled as a pupil shall attend under the penalties provided for children between 8 and 16. In Oregon the compulsory period is now between 9 and 15, instead of between 8 and 14 as formerly.

Truant officers were the subject of legislation in New Jersey, where their tenure was made dependent upon good behavior and efficiency after one year's service; in Oregon, where they are required to act as probation officers for juvenile courts in certain counties; in Michigan, where they must be appointed by the county school commissioner instead of by the sheriff, and must inspect sanitary conditions of schools; and in Minnesota, where they are required to report to the State superintendent of public instruction.

Provisions for better means of enforcement of compulsory laws are constantly made as the need for them develops. Improvements in details were made in Wisconsin, New Hampshire, Missouri, Nevada, Oregon, and Massachusetts during 1911.

CHILD LABOR.

Comprehensive laws of great importance relating to child labor were passed during 1911 in Colorado, Indiana, Michigan, Missouri, New Hampshire, Tennessee, Texas, Utah, and Wisconsin. All these States previously had laws that were more or less effective, but in no case did the old law compare with the new in completeness or in definiteness. The new measure of New Hampshire is especially comprehensive and well drawn; that of Colorado is nearly as complete; and those of Tennessee, Texas, Utah, and Missouri are notable in that they greatly broaden the field of legal regulation, for in those States the previous enactments were of limited application.

The most advanced laws prohibit employment before the age of 16 unless the child has completed the eighth elementary grade, but that standard is still considered too high in most of the States. Ability to read understandingly and to write legibly is all the education that is required in New Hampshire and Colorado for children between 14 and 16, and that is as far as the requirements of the majority of the States go. The new law in Utah apparently does not clearly express its full meaning, and some of the ideas that seem to have been in the minds of its authors will probably fail of realization. There is enough in it that is enforceable, however, to constitute a marked advance.

The Michigan law mentioned above amends previous acts, but its scope is such that it is entitled to be classed as an important general law. One of its provisions demands especial mention, namely, that of limited "vacation permits," for which all educational qualifications are waived, though all other requirements of the law must be enforced. As the name indicates, they are issued only during the summer vacation. Another paragraph provides for age certificates for persons over 16 years of age. Such certificates are issued in cities by officers of the State department of labor, or in the absence of such an officer by the superintendent of schools. Proper proof of age must be required by the issuing officer, and the certificates may be accepted by employers at their face value; if the holder of the certificate should prove to be younger than the age stated in the certificate the employer will not be liable to prosecution. The advantage of such protection is manifest.

The Indiana statute mentioned relates particularly to the hours and character of work of minors, and its effect upon the schools is indirect only, since no clause in it relates specifically to school attendance.

The hours of employment of children are regulated by law in a constantly increasing number of States. The "Osborne law" in New Jersey prohibits the employment of any child under 16 in a mercantile establishment for more than 58 hours per week, or between 7 p. m. and 7 a. m., except during the Christmas season. Other recent laws

fix maximum weekly working hours as follows: Colorado, Missouri, and Wisconsin, for persons under 16, 48 hours; New York and Indiana, under 16, 54 hours; Utah, boys under 14 and girls under 16, 54 hours; New Hampshire, boys under 16 and girls under 18, 58 hours; North Carolina, under 18, 60 hours. In California, persons under 18 are prohibited from working between 10 p. m. and 5 a. m.; the former law applied only to persons under 16.

The campaign of the National Child Labor Committee for better messenger laws has lost none of its vigor. The Küchler law in Utah prohibits the employment of any person under 21 as a messenger in any city of the first or second class between 9 p. m. and 5 a. m., and forbids any minor to deliver goods or messages at any time to questionable resorts. Laws with a similar purpose, though differing in details, were recently enacted also in New Jersey, Michigan, Wisconsin, Oregon, Tennessee, Texas, and New Hampshire.

In Delaware a commission has been constituted to investigate the laws in relation to child labor and to prepare a comprehensive bill upon the subject for presentation to the next general assembly.

SCHOOL CENSUS.

Constant improvement is manifest in the school census of the several States, not only because of improved laws relating to the census itself, but because of the closer attention given to children in their homes as the result of the compulsory attendance acts. Many truant officers can readily make an accurate school census of the territory under their charge without leaving their offices, so complete are the records and their knowledge of the children for whose attendance they are responsible. Notwithstanding all this, unaccountable errors frequently occur in the reported figures, and no law seems stringent enough to wholly prevent carelessness on the part of enumerators. New statutes continue to appear as new remedies are suggested. In Michigan it was enacted that each enumerator shall make affidavit that he made a house-to-house canvass in the territory assigned to him. In Maine a more radical measure was passed, which will be effective against gross errors that are apparent on the face of the returns. The governor and council may require a school census to be retaken in any town when upon report of the State superintendent of schools it is apparent that such census was inaccurately taken in that town.

Two laws of the year relating to school census counterbalance each other: Minnesota inaugurated such work, and California discontinued it. A new compulsory attendance law was the moving reason for the Minnesota census, and the changed basis of apportionment in California, by which average attendance was substituted for school population, led to the repeal of the census law in that State.

TRANSPORTATION OF PUPILS.

In a previous section of this paper transportation was discussed as it affected the consolidation of districts; but there are many conditions that demand legal regulation or authorization of transportation without requiring a change in the organization of any district. The means and methods of transportation are generally understood, and the laws that relate to the subject usually refer to details. A few of them are of more than passing importance, however.

A variation from the usual provisions for transportation is found in the Minnesota law granting aid to consolidated districts. The school board of such a district is authorized to pay a reasonable amount for board and lodging in lieu of transportation of pupils living at a distance from the schoolhouse. Another unusual development is the South Dakota law (chap. 141), which provides that when transportation is not furnished the school district shall pay to the parents or guardians of pupils living from 2½ to 3 miles from the nearest schoolhouse 10 cents per day of actual attendance; of those living 3 to 4 miles, 25 cents per day; 4 to 5 miles, 35 cents; 5 to 6 miles, 45 cents.

These two enactments are examples of the unexpected results that sometimes follow new lines of legislation. In one case public funds not only furnish free tuition with all that it implies, but also pay a part of the board and lodging of the pupil; in the other case the parent is paid in cash for sending his child to school, for there is no requirement that he shall transport the child. In neither case does the element of charity enter.

It is by no means unusual to pay parents for transporting their own children, although in some States that practice is not permitted. In Iowa it was but recently enacted (chap. 143, 1911) that the school board of a consolidated district may require that children living an unreasonable distance from school shall be transported by the parent or guardian a distance not exceeding 2 miles to connect with the school wagon, and the board shall allow reasonable compensation for the transportation to and from the point where the children are taken over by the wagon.

Other laws upon the general subject of transportation were enacted during the year in California, where pupils may be transported at the cost of the county to county high schools; in Kansas, where any district board may provide transportation for pupils living more than 2½ miles from school; in Missouri, where the limit of distance is only one-half mile; in New Hampshire, where school districts were authorized to purchase necessary vehicles; and in Pennsylvania, where it is provided that no pupil of a discontinued school shall be required to walk more than a mile and a half to a consolidated school.

HOLIDAYS.

In Rome in the time of the Republic 64 days in every year were devoted to public festivals recognized by law. The American Republic has not reached such a number of holidays, but its schools surpassed it long ago. The summer vacation, the Saturday holiday, short sessions or no sessions on stormy days, teachers' institutes, visiting days, sundry legal holidays, and days of special observance have so lessened the actual school time that scarcely more than half the days in the year as a rule are given to regular school work. This is a fact so universal that it rarely excites comment; yet it was not so in the earlier days. Seventy years ago, or thereabouts, the schools of Buffalo were in session all the year round; those of Brooklyn, Baltimore, and Cincinnati, 11 months; New York City, 49 weeks; Chicago, 48 weeks; Philadelphia, 251 days; Detroit, 259 days; Washington, 238 days; Boston, 224 days, etc. The change has come about so gradually that it has scarcely been noticed. The most recent movement that affects the situation in this regard is that for the adoption of Columbus Day as a public holiday. Nine States, namely, Delaware, Indiana, Kansas, Maine, Nebraska, Oklahoma, Oregon, Texas, and Vermont, have during the past year designated October 12 as a legal holiday to celebrate the discovery of America.

But signs of a reaction have begun to appear. The Denagri law in California reduces the number of school holidays to Saturdays, Sundays, January 1, May 30, July 4, December 25, and Thanksgiving Day. All other legal holidays must be observed by appropriate exercises, but not by closing the schools. Similar action was taken in the Legislature of Michigan, but in that State Labor Day is classed as a holiday.

In Pennsylvania the new code provides (sec. 2109) that "the time in attendance at the annual teachers' institute shall not be considered as days taught or lessen the actual number of days in the minimum school term." The old law provided that the schools should be closed during the sessions of institutes and that teachers should be paid for attendance, but stipulated that 20 days actual teaching should continue to constitute a school month. The new provision leaves no doubt of its meaning. In this respect it is in marked contrast to the statutes of some of the other States, which not only provide that the time spent in teachers' institutes shall be counted as school time, but that in compiling the records of aggregate attendance of pupils a proportionate number shall be allowed as representing attendance on institute days, although no school was then in session.

TEXTBOOKS.

In most of the States the textbook question appears to have been settled with a degree of definiteness, for there has been a noticeable cessation of activity in legislation upon that subject. Only two

important book laws were reported during the past year, namely, those of Florida and Minnesota. In the former State, county uniformity has been the rule for the past 10 years, and the State-wide system was logically the next step in progress. The new law constitutes the board of commissioners of State institutions as a State textbook commission, and also creates a subcommission of nine professional teachers and school officers. The usual duties of selection, contract, etc., are vested in these boards, and penalties are provided for the use of any book not upon the adopted list, and for overcharge on the part of contractors.

The previous conditions in Minnesota were not by any means bad as a whole, and the new enactment of that State was for the regulation of publishers and of prices rather than of the general system itself.

A general investigation of the textbook situation in Wisconsin has been ordered by the legislature of that State, the purpose being the correction of any abuses that may be found to exist, particularly in the sale of books.

A uniform system of blank books and records for all school districts has been provided for in Kansas; the minimum equipment of every schoolroom has been prescribed in South Dakota; the participation of county officials and school-teachers and officers in school contracts has been forbidden in North Dakota; the composition of the subcommission on textbooks of North Carolina has been altered; and similar changes of secondary importance were reported from other States.

FIRE DRILL; INSTRUCTION IN FIRE DANGERS.

In Iowa, Michigan, and Pennsylvania the office of State fire marshal was created during the year, and in each case the office was charged with duties in connection with schools.

In Iowa the fire marshal and his deputies must require teachers of public and private schools to have fire drills and to see that all doors and exits are kept unlocked during school hours. He must prepare and publish a bulletin upon the causes and dangers of fires, and teachers in all public schools shall instruct their pupils at least once each quarter in the matters covered by the bulletin.

Similar provisions were made in Pennsylvania, but more constant class instruction is contemplated in that State, for it is enacted that the curriculum of the public and private schools of the State shall include some regular and continuous study of the dangers of fire and the prevention of fire waste during the entire school year.

The Michigan law provides neither for the publication of bulletins nor for such classroom instruction, but it does require the State fire marshal and his deputies to enforce monthly fire drills and to see that exits are kept unlocked.

In Nebraska the first Friday in November was designated "State Fire Day," and must be observed in all public, private, and parochial schools with appropriate exercises. A book for instruction in fire dangers and fire prevention must be prepared by the State fire commissioner and the State superintendent of public instruction. A copy must be furnished to every teacher, and instruction must be given from it for at least 30 minutes in every school month.

MEDICAL INSPECTION.

No general compulsory medical inspection laws were passed during 1911, but two additional States have required periodical examinations of the eyes and ears of all pupils, compulsory laws of limited application were passed in two other States, and several excellent permissive laws were enacted.

Medical inspection was the subject of animated discussion in Pennsylvania during the consideration of the new school code, and it was vigorously debated in both houses of the legislature. The provisions finally enacted were the result of compromise. Each district with a population of over 5,000 is required to provide professional medical inspection, and the State department of health is directed to furnish similar inspection for all pupils in districts having less than 5,000 inhabitants. The board of directors of any district having less than 30,000 inhabitants may, however, suspend the operation of the law in that district; and if the parent of any child so desires, the examination of that child must be made in the presence of the parent. These two provisions were plainly inserted to meet the objections of those who opposed compulsory inspection. They are so worded that as experience proves the value of the measure the extent of its application will increase almost automatically, for positive action is required for its suspension rather than for its adoption.

It is probable that this law, notwithstanding its nonobligatory features, will prove more effective as a whole than those laws that require local authorities to provide inspection, even though that requirement is general in its scope. The direction and control of the inspectors in the rural districts by a State board is a novel provision whose success can scarcely be doubted. The inspection contemplated will cover not only the physical condition of the pupils, but the sanitary conditions of the schools themselves. The same article authorizes the employment of school nurses, and forbids any person having tuberculosis of the lungs to be a pupil, teacher, or janitor or other employee of any public school unless it be a special school under the regulations of the commissioner of health.

The West Virginia Legislature passed an act requiring the board of education in every independent district to appoint a medical

inspector and authorizing like boards in magisterial districts to appoint such officers.

In Indiana an excellent medical-inspection measure was coupled with the sanitary schoolhouse bill to which reference was made on page 90. Both passed, but the inspection bill was amended so that its adoption was made optional with local authorities. This law contains a clause that is worthy of note as forestalling the objections that are most frequently urged against such laws. A certificate from a reputable physician that he has examined a certain child and has notified its parents of the result will be accepted in lieu of examination by the school physician. A parent, therefore, may have his children examined by the family physician if he prefers not to subject them to examination by a stranger.

Medical-inspection laws, optional in their terms, were passed in Vermont and Rhode Island also. In the latter State half the expense will be borne by the State, but no one city or town may receive over $250 annually. The Rhode Island law provides also that an examination of the sight and hearing of all pupils shall be made annually either by teachers or school physicians. A similar requirement was enacted in Utah, and in that State the breathing habits of each pupil must also be noted, the evident purpose being the detection of adenoids.

The health laws of North Carolina were extensively amended by the past legislature, and one of the new paragraphs assigns to the county superintendent of health in certain counties the duties of "quarantine officer." These include the inspection of all school buildings and the examination of all pupils who are reported by their respective teachers to be defective in eyes, ears, nose, or throat, and also the examination, if practicable, of the feces of every child whom he suspects of having hookworm disease. If the examination of a child discloses any organic defect or hookworm disease, the superintendent of health must suggest to the parent the proper course of treatment and urge that such treatment be procured. He must also "through the county press, public addresses, and in every available way, endeavor to educate the people of his county to set a higher value on health, and to adopt such public and private measures as will tend to the greater conservation of life." Unfortunately the application of this law extends to not more than two counties of the State.

In addition to the foregoing, several laws were passed during the year upon specific subjects relating to hygiene and sanitation. In California the provisions relating to vaccination of school children were modified so that the requirement will not be enforced except when there is danger of an epidemic of smallpox.

The use of common drinking cups was forbidden in New Jersey, Illinois, and Ohio, and the installation of sanitary fountains, whenever it is practicable, was enjoined in Indiana. The Legislature of Oregon authorized school boards to exclude any pupil who is affected with vermin or uncleanliness.

ADDENDUM.

In addition to the laws described in the foregoing pages, important measures were enacted during 1911 upon the following subjects:

PHYSICAL TRAINING; PLAYGROUNDS.

Indiana: Public playgrounds, baths, and comfort stations in first-class cities. *Kansas:* Tax for public parks and playgrounds in cities. *Massachusetts:* Supervision of sports on school playgrounds *Michigan:* Physical training in normal schools and city districts; formation of corporations for maintaining playgrounds; any district may maintain school gymnasiums. *Minnesota:* Parks and playgrounds in cities. *New Hampshire:* Town appropriations for public playgrounds. *Ohio:* Boards of education may secure playgrounds. *Pennsylvania:* Boards of recreation in first-class cities. *Rhode Island:* Public playgrounds in Providence. *Wisconsin:* Physical training in cities, and in normal schools and training schools for teachers; school boards in cities may maintain gymnasiums, playgrounds, baths, etc.

ADDITIONAL SUBJECTS OF INSTRUCTION.

Delaware: Moral and humane education. *Massachusetts:* Application of surgical remedies and first aid to the injured. *Minnesota:* Day for special exercises relating to geography, history, and resources of the State. *Porto Rico:* Commercial instruction. *Wisconsin:* State history; manual training circuits.

HIGH SCHOOLS.

Alabama: Increasing appropriation for county high schools from $2,000 to $3,000 each. *Arkansas:* General high-school law, including supervision by State board of education, classification of schools, and State aid. *California:* Permitting military drill. *Illinois:* High-school districts apart from elementary school districts. *Indiana:* Joint high schools, maintained by a city or incorporated town and contiguous townships, etc.; high schools may continue for a longer term than elementary schools of same township. *Iowa:* Free high-school privileges for all pupils for four years. *Kansas:* Special tax for high schools in counties with less than 10,000 inhabitants; township high schools in counties with more than 10,000 inhabitants. *Maine:* Certain towns may contract with academies in other towns. *Michigan:* Amends tuition law and provides for eighth grade diplomas. *Nebraska:* County boards of regents to control county high schools. *New Hampshire:* State superintendent may terminate contracts between a school district and an academy. *Oregon:* Union high-school districts. *South Dakota:* Free tuition for all pupils for four years. *Texas:* General high-school law, including classification, State aid, provision for agriculture, etc., county school trustees, etc. *Utah:* Creating high-school districts and providing for their government. *Vermont:* State superintendent shall control examinations for entrance into high schools. *Washington:* Uniform high-school inspection. *West Virginia:* Relating to district high schools, including classification by State superintendent and State aid; county high schools in two additional counties.

AGRICULTURAL, INDUSTRIAL, AND VOCATIONAL SCHOOLS.

Alabama: New industrial school at Lineville. *Colorado:* State trades school at Aspen; school of agriculture and mechanic arts at Fort Lewis. *Indiana:* Trade school in Indianapolis. *Maine:* General act for the encouragement of industrial education, including supervision by State superintendent, industrial training in State normal schools, State aid for local institutions, etc. *Massachusetts:* General law providing for a system of vocational education, including definition of terms, State supervision, local control, State aid, etc. *Michigan:* One additional county school of agriculture; any district may maintain trade, vocational, industrial, marine, and manual training schools, etc. *Minnesota:* Twenty additional State-aided schools of agriculture, etc.; important amendments to law relating to such schools; additional State aid for industrial departments of high schools. *Nebraska:* School of agriculture in the southeastern portion of the State. *New York:* State school of agriculture at Cobleskill. *North Carolina:* General law providing for county farm-life schools, including State supervision, local control, extension work, State aid, etc. *North Dakota:* General law providing for county agricultural and training schools, including joint maintenance by State and county; State aid for departments of agriculture and domestic science in State high, graded, and consolidated schools. *Ohio:* Instruction in agriculture in all common schools except in cities. *Vermont:* State school of agriculture at Randolph. *Wisconsin:* General law providing for industrial, commercial, continuation, and evening schools, including State board of industrial education, State supervision, local control, special local tax, State aid, vocational normal school, etc.; additional State aid to county schools of agriculture and domestic economy; additional State aid to districts maintaining courses in agriculture, domestic science, etc.

SPECIAL TYPES OF SCHOOLS.

Indiana: Night schools in cities; tax limit for kindergartens in cities. *Massachusetts:* School committees may require deposit of $1 by night-school pupils. *New Jersey:* Special classes for subnormal children. *Oregon:* Requiring evening continuation schools in Portland. *Washington:* Free kindergartens may be established by school boards in certain cities. *Wisconsin:* School boards of cities may establish evening schools, vacation schools, reading rooms, debating clubs, etc.; school boards may establish lecture courses and may provide for the education of adults.

HIGHER EDUCATIONAL INSTITUTIONS.

Colorado: Making the State Normal School at Greeley the State Teachers' College. *Illinois:* Annual State tax of 1 mill for the State University. *Indiana:* State institutions may acquire property by condemnation; appropriating $30,000 annually for agricultural extension work by Purdue University. *Iowa:* Extending for an additional period of five years the State tax for buildings for certain higher institutions. *Massachusetts:* Appropriating $100,000 annually for 10 years to Massachusetts Institute of Technology. *Michigan:* General law relating to incorporation of colleges. *Nevada:* Establishing a school of mines at Virginia City. *New York:* Establishing a State college of forestry at Syracuse University; incorporating Carnegie Corporation. *North Carolina:* Commission to report on advisability of combining the State Department of Agriculture with the Agricultural and Mechanical College. *Oklahoma:* Consolidation of control. *Porto Rico:* Municipalities may maintain scholarships. *Utah:* State university shall not give instruction in agriculture and domestic science except in normal course; Agricultural College may grant a degree of engineering in agriculture; providing a permanent means of support for the University of Utah, and setting apart annually therefor 28 per cent of the general State tax. *Washington:* Annual tax for each of the higher institutions of the State. *Wisconsin:* Increasing the tax for State University from two-sevenths to three-eighths mill.

PROFESSIONAL SCHOOLS; PROFESSIONAL PRACTICE.

Illinois: Regulating the practice of medicine, including requirement of four-year course, examination by State board of health, and not over 18 months' hospital practice. *Nebraska:* Requirements of schools of medicine, including at least high-school course for matriculation, full equipment and faculty, hospital and dispensary, four-year course for graduation, supervision by board of health. *New Jersey:* Requiring at least four-year high-school course before entrance to dental college. *New York:* Certification of shorthand reporters by department of education. *Pennsylvania:* Creating in the department of public instruction a bureau of medical education and licensure, and also a bureau of professional education.

LIBRARIES.

See Chapter V.

SCHOOLS FOR SPECIAL CLASSES.

Colorado: Establishing a State home for mental defectives; creating the office of State teacher of the adult blind. *Illinois:* Authorizing school boards to maintain classes and schools for the deaf, dumb, and blind; State aid. *Nebraska:* Consolidation of control of State institutions. *North Carolina:* Establishing a State school for the feeble-minded. *Rhode Island:* Instruction for adult blind at their homes.

WELFARE OF CHILDREN; DEPENDENTS AND DELINQUENTS.

California: Prohibiting the sale of tobacco to persons under 18. *Illinois:* School boards may maintain schools or classes for delinquents, with State aid; system of probation for certain offenders; juvenile court may return dependent or neglected children to parents and fix amount to be paid from county founds for their support. *Indiana:* Children in eleemosynary institutions shall be sent to school; transfers from Girls' School to Woman's Prison. *Iowa:* Commitment of girls to private institutions; age for commitment to Industrial School fixed at 10 to 18, instead of 9 to 16. *Kansas:* Maximum age for commitment to State Industrial School for Girls fixed at 18, instead of 16. *Maine:* Consolidated control of industrial schools. *Massachusetts:* Prohibiting solitary confinement in reform schools. *Michigan:* Forbids confinement of delinquent children in jails, etc. *Minnesota:* Detention homes for dependent and delinquent children. *Missouri:* Support of destitute mothers in Kansas City; repealing age limitation of children committed to truant schools. *Nebraska:* Forbidding minors under 18 to use tobacco. *Nevada:* Prohibiting any minor to remain in a saloon; important amendments to general law. *New Jersey:* Transfers from State Home for Boys to the State Reformatory; prohibiting admission of unaccompanied children to resorts. *North Carolina:* Reform School for Colored Youths. *North Dakota:* Providing for a juvenile court; prohibiting children from carrying or using firearms. *Ohio:* Commission to revise child-welfare laws; women shall convey girls committed to Industrial Home. *Pennsylvania:* School for boys under jurisdiction of juvenile courts in certain counties. *Rhode Island:* Curfew regulations for certain minors. *Utah:* Detention homes in certain counties; prohibiting the sale of tobacco or opium to minors, and forbidding minors to have same in possession. *Vermont:* Transfers from Industrial School to House of Correction.

CHAPTER IV.

RECENT PROGRESS IN CITY SCHOOLS.

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VI. Secondary education: Relation to higher education; extension of the curriculum; junior high schools.
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X. Playgrounds.

INTRODUCTION.

In summing up tendencies in city school systems during the first decade of the twentieth century, the commission appointed to study the system of education in the public schools of Baltimore, of which Dr. Elmer Ellsworth Brown was chairman, said in its report:[1]

On the side of school administration certain tendencies have been apparent during the decade, among which the following may be mentioned: The movement to reduce the number of members of school boards, the increasing demand for the removal of the schools from the influence of partisan politics, and the employment of specialists in different departments of the business management and the scholastic supervision of the educational system. As regards the teaching force, it may be said that the trend has been in the direction of higher salaries and the requirement of superior qualifications and greater efficiency. Closer supervision, a more flexible course of study for high schools, provision of special classes for exceptional children, more varied and more specialized teaching in the upper elementary grades, a closer adap-

[1] United States Bureau of Education. Bulletin No. 4, 1911.

tation of the ordinary school work to the ordinary needs of life, and provision in continuation schools for children who are compelled to go to work early in life are some features of educational endeavor that have been uppermost of late in the minds of our educational authorities.

The decade has been marked by the extension of the school system to include various special activities, such as those of social and recreation centers, playgrounds, school gardens, baths, school lunchrooms, and savings banks operated by pupils in school, all of which seem destined to render the school more widely serviceable to the people.

Within the decade some movements of still larger significance have made notable headway. Perhaps the most important of these has appeared in the demand for vocational training. Within the past decade the emphasis in manual training has shifted from the cultural to the vocational aim, and now many school systems offer training which looks directly to a vocation in the industries. In addition to this industrial training, commercial courses and courses in domestic economy for girls have grown in popularity and are now widely offered in public schools.

The purpose of this chapter is to state more at length the tendencies that may be traced through the last years of the decade in question and through the year 1910–11. It is, however, not attempted to give every item of progress in each city, nor to mention every possible example of items that are given, but rather to bring together and summarize the more significant progressive steps.

I. ADMINISTRATIVE CHANGES.

School administration now tends toward centralization. This is seen in the reduction of the number of members of school boards and their appointment or election at large instead of by wards, in the concentration of control on the business side in business experts, and in the extension of professional control.

The tendency to reduce the number of members of school boards, which has engaged the attention of school administrators for a score of years or more and which received a marked impetus in 1905, when Boston reduced the number of members of its school committee from 24 to 5, has received further momentum during the past year. The most notable examples of this tendency are the cities of Pennsylvania; Louisville, Ky., and New York City.

By an act of the General Assembly of Pennsylvania, approved May 18, 1911, a new school code was adopted which entirely reorganized the public-school system of the State. Under the provisions of this act each city, incorporated town, borough, or township is constituted a separate school district, and districts thus established are divided into four classes according to population as shown by the United States census. Each separate school district is now administered by a "board of school directors," the number of members depending upon the class to which the district belongs. The classification of the different districts, with the number of directors to which each class is entitled under this act, is as follows:

Class.	Population.	Number of members of board.
First	500,000 and over	15
Second	30,000 to 499,999	9
Third	5,000 to 29,999	7
Fourth	Under 5,000	5

There are now in the State two districts of the first class—Philadelphia and Pittsburgh. Fourteen cities in the State are entitled to the rank of district of the second class. After each Federal census the State superintendent of public instruction shall make a reclassification upon the basis of population shown.

The number of members of the Philadelphia school board is by this act reduced from 21 to 15. Under the old law the central board of education of Pittsburgh was composed of 45 members, elected by the local boards of the subdistricts into which the city was divided. The reduction of this number to 15 involves therefore a more radical change than that in Philadelphia, but in some of the smaller cities the ratio of reduction is even greater. In Harrisburg the board formerly consisted of 32 members; in Reading, of 64 members; in Williamsport, of 52 members. According to the census of 1910 each of these cities will under the new school code have a board of school directors consisting of 9 members only.

In many of the cities of the State the school boards were formerly composed of members elected by wards or subdistricts practically coterminous with wards. This was the case in Pittsburgh, where the 45 subdistricts were in most cases coterminous with the wards of the city. Under the provisions of the new code all school directors are now appointed or elected at large. Sections 207 and 208, which relate to the eligibility of school directors, are as follows:

SEC. 207. Any citizen of this Commonwealth, having a good moral character, being twenty-one years of age or upwards, and having been a resident of the district for at least one year prior to the date of his election or appointment, shall be eligible to the office of school director therein: *Provided*, That any person holding the office of mayor; chief burgess; county commissioner; district attorney; city, borough, or township treasurer; city councilman; township commissioner; road supervisor; tax collector; comptroller; auditor; or constable—shall not be eligible as a school director in this Commonwealth.

SEC. 208. Any person who has held any office of trust or profit under the laws of the United States or of this Commonwealth, or in any county, city, borough, or township therein, and has been removed therefrom for any malfeasance in office, shall not be eligible to the office of school director.

In districts of the first class, school directors are appointed by the judges of the courts of common pleas of the counties in which the districts are respectively situated. After the expiration of the terms of

the first appointees such appointments will be made for a term of six years, five members being appointed every two years. In districts of the second, third, and fourth classes directors are elected by vote of the people at the regular municipal election. As in the case of districts of the first class the term of office is six years, and as nearly as possible one-third of the members are to be elected every three years.

By an act approved March 4, 1910, the boards of education of cities of the first class in Kentucky were fixed at five members each. Louisville is the only city of the first class in the State. Under the provisions of this act the number of members of the board of education of that city was reduced from 16 to 5, the new board being elected by the vote of the people and at large instead of by wards, as was formerly the custom. The term of office is four years. Elections are held biennially, two members being elected at one election and three at the succeeding election. As provided in the act, the new board was elected in November, 1910, and began its duties January 1, 1911.

A bill embodying far-reaching changes in the administration of the public schools of the city of New York was introduced in the legislature of the State early in 1911, but at the time of this writing it has not become a law. The bill provides for the enactment of a new charter for the city, and the chapter devoted to the department of education abolishes the separate corporate existence of the board of education and makes the board a department of the city government. Under the provisions of the bill the personnel of the new department shall consist of a president and six other members, who shall be known as commissioners of education. After the expiration of the initial term each member is to be appointed for a term of seven years, one member being appointed each year. Appointments are to be made by the mayor of the city. The bill provides compensation of $10,000 a year for the president of the board and $9,000 a year for each of the other six members. If enacted into law, this bill would reduce the number of members of the school board from 46 to 7.

By an act of the General Court of Massachusetts approved March 18, 1910, the number of members of the school committee of the city of Newton was reduced from 15 to 8.

The final effects of the present tendency to reduce the number of members of school boards can not of course be foreseen, but the enactment of such laws as that embodied in the new Pennsylvania school code will without doubt give impetus to the movement. The Pennsylvania Code represents one of the most significant steps taken in recent years toward the standardization of school administrative units and should exert a wholesome influence on other sections of the country.

REMOVAL FROM PARTISAN POLITICS.

Coincident with the reduction of the number of members of school boards it is usually provided that members shall be elected from the city at large and not as representatives of the several wards. Election at large is an outgrowth of the conviction that partisan politics, which is often found where the ward system of representation prevails, should be eliminated from the administration of school affairs. It is urged that boards of few members, each of whom is elected to represent all the people, can be kept freer from political influences than can boards of large membership chosen by the local electorate of subdistricts or wards.

On the necessity of the removal of the schools from the influence of partisan politics there is unanimity among educators. The school system should have nothing in common with a local political machine, and wherever the two are brought into relation the schools suffer. As the people come to see this fact more clearly, the demand grows for the complete separation of politics and school administration.

It is worthy of note in this connection that the Kentucky law, to which reference has already been made, makes special provision against partisan political influences in the election of members of the school board, though the election is held at the same time as for other municipal officers. No public officer, except a notary public or an officer of the State militia, may be a member of the school board. Separate ballots and ballot boxes must be used for the election of members, and provision is made against giving voters information as to the political affiliations of any candidate. The new Pennsylvania Code provides that directors in cities of the first class shall be appointed by the judges of the courts of common pleas, thus seeking to remove their selection from political influences. While the election of directors in districts of the other three classes is held at the regular municipal election, the qualifications for eligibility prescribed in sections 207 and 208 will tend to prevent activity on the part of local politicians.

BUSINESS EXPERTS.

In some of the larger cities of the country experts in mercantile affairs are now employed, whose duties on the material side of school administration are coordinate with those of the superintendent on the educational side. This business manager, or business director, is the executive officer of the school board in business transactions. In this, Cleveland, Ohio, was the pioneer, the office of "director of schools" having been in existence there since the enactment of the law of March 8, 1892, which reorganized the board of education. Indianapolis, Ind., has employed a "business director" since 1900. In 1906, after the reorganization of the school committee, a "business

manager" was elected in Boston at a salary of $3,780. Cincinnati followed in 1908 with the creation of a similar office. Houston, Tex., has employed a "business representative" since 1905.

During the past two years three other important cities have added such officers to their corps of administrative officials. By provision in the act of the General Assembly of Kentucky, approved March 4, 1910, the position of "business director" was created in Louisville. In his annual report for 1910 President Alfred R. Urion, of the Chicago board of education, urged the adoption of a plan "whereby there shall be one business head charged with the full responsibility, as is done on the educational side in the case of the superintendent of schools." In accordance with President Urion's recommendation, the position was created and a business manager was appointed in January, 1911.

The office of "executive agent" was created in Minneapolis, Minn., in 1909, but some difficulty was experienced in securing a person of the qualifications sought, and the position was not filled until June, 1911.

The rules and regulations of the board of education of that city prescribe the following as the duties of the executive agent, and they may be considered as typical of the functions of officers of this class:

The executive agent, as provided in section 11, shall have direct supervision over the school properties and the maintenance thereof. He shall generally represent the board in all negotiations relating to the construction, reconstruction, repair, and maintenance of school properties. He shall supervise the purchase, receipt, and distribution of all supplies, books, and materials, as authorized by the board. All requisitions for the delivery of supplies shall be approved by him.

He shall have authority to engage and discharge such employees as are necessary to the conduct of the activities expressed herein and shall report thereon to the committee on buildings and supplies for the final approval of the board.

He shall, prior to the first regular meeting of the board in June of each year, prepare a list of janitors and other employees for the various schools and such list shall have attached thereto the salary proposed to be paid each person therein shown. Such list, when approved over the signature of the executive agent, shall be delivered by him to the committee on buildings and supplies for submission to the board.

He shall submit to the board monthly a report considering in appropriate detail information relating to the construction, reconstruction, repair, and distribution of school supplies, with such suggestions as may be appropriate thereto.

He shall attend all meetings of the board and, when requested, the meetings of standing committees.

He shall devote his entire time to the interests of the board, and maintain such regular hours as may be prescribed by the board, at its office.

He shall give a bond for the faithful performance of his duties, in such sum as the board may determine.

PROFESSIONAL CONTROL.

On the side of professional control, the tendency has been toward closer supervision of school work and increased authority and responsibility for the superintendent and his supervisory staff. In 1906

the Bureau of Education reported 6,600 supervising officers and 106,026 teachers in cities of 8,000 population and over. For the year 1909–10 the corresponding numbers were 11,144 and 125,246, respectively. Thus, during a period of five years, the increase of supervising officers was 68.8 per cent while that of teachers was only 18.1 per cent. The ratio of teachers to supervisors in 1906 was 16.6; in 1910 it was only 11.2. While the more comprehensive wording of the question relating to supervising officers in the schedule sent out in 1909 and again in 1910 resulted in an apparent abnormal increase over the year 1908 and previous years, this does not account altogether for the preponderance over the increase in teachers. In a single year, from 1909 to 1910, when the schedules used were identical, the increase of supervisors in cities of the same class was 10.87 per cent, while that of teachers was only 3.96 per cent. These figures of the Bureau of Education show the tendency toward a closer professional supervision of the schools.

II. TEACHERS' SALARIES.

In his annual report for 1909, Supt. Frank M. Martin, of El Paso, Tex., aptly stated the case of the inadequacy of teachers' salaries by pointing out that American cities pay their policemen more to take their youth to jail than they pay their teachers to keep them out. Supt. Martin might have expressed himself even more strongly, for in some cities the employees of the street-cleaning department, popularly known as "white wings," receive an annual wage greater than that of some teachers.

It is evident, however, that the cause of the teacher is receiving more consideration. Various cities report increases in salaries and readjustments of schedules in order to provide increased pay. From statistics collected and compiled by the Bureau of Education it appears that the average cost of teaching and supervision per pupil in daily attendance increased from $20.10 to $27.98, a gain of 39.2 per cent, during the decade from 1900 to 1910. Between the years 1908 and 1910 expenditure for supervision and teaching in cities of 8,000 population and over increased 18 per cent, while the increase in the number of supervisors and teachers combined was only 11.7 per cent. Thus expenditure for salaries is shown to be increasing at a more rapid rate than is the number of supervisors and teachers.

In January, 1910, the board of estimate and apportionment of the city of New York passed a resolution providing for the appointment of a commission "to investigate the justice, economy, and adequacy of the present and proposed schedules of salaries for the payment of teachers of the department of education." While the main purpose of the commission was to investigate the matter of the

equalization of salaries of men and women teachers, the whole question of salaries was considered, and the conditions in other large cities were studied. The following tables are taken from the report of the commission, which was made in October, 1910:

Percentage of increase in salaries of grade teachers in certain cities between 1905 and 1910.[1]

Cities.	Per cent increase.	Cities.	Per cent increase.
Toledo	41	San Francisco	17
Baltimore	39	Cleveland	13
St. Louis	39	Chicago	11
Jersey City	29	Louisville	11
Indianapolis	29	Cincinnati	11
Rochester	29	Pittsburgh	8
Minneapolis	28	New Orleans	8
Detroit	28	Philadelphia	6
St. Paul	27	Boston	(2)
Milwaukee	25	Buffalo	(2)
Newark	20	Kansas City	(2)
Providence	18		

[1] Report to the board of estimate and apportionment of the city of New York by the commission on teachers' salaries, New York, 1910.
[2] No change.

Percentage of increase in salaries of high-school teachers in certain cities between 1905 and 1910.

Cities.	Per cent increase.	Cities.	Per cent increase.
Cincinnati	50	Milwaukee	14
St. Paul	36	New Orleans	13
San Francisco	36	Chicago	13
Baltimore	33	Providence	12
Newark	26	Cleveland	6
Pittsburgh	26	Detroit	2
Jersey City	22	Boston	(1)
St. Louis	22	Buffalo	(1)
Minneapolis	18	Kansas City	(1)

[1] No change.

A comparison may be made of salaries reported in 1911 to the Bureau of Education with those reported in 1905 by the committee appointed by the National Education Association to study and report on "Salaries, tenure, and pensions of public-school teachers in the United States." In the following table are presented the minimum and maximum salaries of elementary teachers in representative cities of 10,000 population and over which reported both to the committee of the National Education Association and to the Bureau of Education. The last two columns show increases in both minimum and maximum salaries. It is significant that of all the cities for which figures were available for comparison, only one city reported a decrease.

Comparison of minimum and maximum salaries of elementary school teachers reported to the Bureau of Education in 1911 with those reported to the committee of the National Education Association in 1905.

CITIES OF 100,000 POPULATION AND OVER.

Cities.	Minimum and maximum in 1905.[1]	Minimum and maximum in 1911.	Increase in minimum salary.	Increase in maximum salary.
Los Angeles, Cal	$600.00–$760.00	$744.00–$1,080.00	$144.00	$320.00
Oakland, Cal	660.00–900.00	780.00–1,200.00	120.00	300.00
San Francisco, Cal	720.00–996.00	840.00–1,224.00	120.00	228.00
New Haven, Conn	300.00–750.00	450.00–850.00	150.00	100.00
Chicago, Ill	550.00–1,025.00	650.00–1,125.00	100.00	100.00
Indianapolis, Ind	400.00–650.00	850.00	.....	200.00
New Orleans, La	315.00–540.00	450.00–700.00	135.00	160.00
Boston, Mass	552.00–1,080.00	552.00–1,080.00	.....	.....
Detroit, Mich	350.00–725.00	500.00–1,000.00	150.00	275.00
Grand Rapids, Mich	350.00–700.00	400.00–750.00	50.00	50.00
St. Paul, Minn	400.00–750.00	450.00–950.00	50.00	200.00
Kansas City, Mo	405.00–630.00	500.00–825.00	95.00	195.00
St. Louis, Mo	420.00–700.00	600.00–1,032.00	180.00	332.00
Newark, N. J	450.00–900.00	580.00–1,200.00	130.00	300.00
Albany, N. Y	400.00–700.00	500.00–750.00	100.00	50.00
New York, N. Y	[2] 900.00–2,400.00 600.00–1,440.00	[2] 900.00–2,400.00 600.00–1,440.00	.....	.....
Rochester, N. Y	300.00–600.00	500.00–800.00	200.00	200.00
Syracuse, N. Y	300.00–650.00	400.00–700.00	100.00	50.00
Cleveland, Ohio	400.00–750.00	500.00–1,000.00	100.00	250.00
Columbus, Ohio	380.00–617.50	450.00–800.00	70.00	182.50
Dayton, Ohio	315.00–630.00	500.00–700.00	85.00	70.00
Portland, Oreg	550.00–750.00	725.00–1,100.00	175.00	350.00
Philadelphia, Pa	[2] 950.00–1,250.00 470.00–870.00	[2] 1,000.00–1,300.00 520.00–920.00	50.00 50.00	50.00 50.00
Pittsburgh, Pa	400.00–750.00	450.00–900.00	50.00	150.00
Providence, R. I	400.00–750.00	500.00–900.00	100.00	150.00
Spokane, Wash	495.00–720.00	600.00–1,000.00	105.00	280.00
Milwaukee, Wis	400.00–900.00	540.00–1,020.00	140.00	120.00

CITIES OF 25,000 TO 100,000 POPULATION.

Waterbury, Conn	$350.00–$650.00	$450.00–$800.00	$100.00	$150.00
East St. Louis, Ill	400.00–700.00	450.00–800.00	50.00	100.00
Terre Haute, Ind	425.00–650.00	540.00–680.00	115.00	30.00
Topeka, Kans	360.00–540.00	360.00–855.00	.....	315.00
Lewiston, Me	300.00–500.00	350.00–600.00	50.00	100.00
Holyoke, Mass	400.00–700.00	450.00–775.00	50.00	75.00
New Bedford, Mass	475.00–750.00	550.00–825.00	85.00	75.00
Kalamazoo, Mich	350.00–500.00	400.00–700.00	50.00	200.00
St. Joseph, Mo	315.00–592.50	450.00–810.00	135.00	217.50
Butte, Mont	650.00–900.00	800.00–1,050.00	150.00	150.00
Nashua, N. H	350.00–450.00	400.00–600.00	50.00	150.00
Camden, N. J	400.00–640.00	500.00–900.00	100.00	260.00
Schenectady, N. Y	375.00–550.00	450.00–800.00	75.00	250.00
Youngstown, Ohio	300.00–650.00	400.00–900.00	100.00	250.00
Erie, Pa	332.50–570.00	380.00–712.00	47.50	142.00
Pawtucket, R. I	360.00–600.00	400.00–720.00	40.00	120.00
Columbia, S. C	315.00–405.00	450.00–540.00	135.00	135.00
El Paso, Tex	540.00–850.00	585.00–810.00	45.00	.....
Salt Lake City, Utah	360.00–720.00	480.00–1,020.00	120.00	300.00
Norfolk, Va	400.00–650.00	450.00–700.00	50.00	50.00
Tacoma, Wash	500.00–750.00	600.00–1,020.00	100.00	270.00
Superior, Wis	427.50–665.00	475.00–712.50	47.50	47.50

CITIES OF 10,000 TO 25,000 POPULATION.

Selma, Ala	$400.00–$800.00	$540.00–$810.00	$140.00	$10.00
New London, Conn	300.00–650.00	400.00–700.00	100.00	50.00
Evanston, Ill	600.00–900.00	650.00–1,000.00	50.00	100.00
Richmond, Ind	475.00–665.00	480.00–850.00	5.00	185.00
Burlington, Iowa	285.00–570.00	349.12–628.42	64.12	58.42
Revere, Mass	400.00–600.00	450.00–700.00	50.00	100.00
Ann Arbor, Mich	325.00–500.00	350.00–725.00	25.00	225.00
Great Falls, Mont	712.50–760.00	720.00–900.00	7.50	140.00
Portsmouth, N. H	300.00–500.00	400.00–650.00	100.00	150.00
Plainfield, N. J	475.00–650.00	600.00–1,100.00	125.00	450.00
Middletown, N. Y	400.00–600.00	500.00–700.00	100.00	100.00
Sandusky, Ohio	300.00–465.00	400.00–650.00	100.00	185.00
Beaver Falls, Pa	360.00–513.00	360.00–675.00	.....	162.00
Cranston, R. I	351.00–507.00	390.00–585.00	39.00	78.00
Walla Walla, Wash	600.00–750.00	700.00–850.00	100.00	100.00
Parkersburg, W. Va	340.00–530.00	425.00–675.00	85.00	145.00

[1] Report of the committee on salaries, tenure, and pensions of public-school teachers in the United States to the National Council of Education. Published by the National Education Association, 1905.
[2] Men.

III. MEASURING THE SCHOOL'S EFFICIENCY.

STUDIES OF ELIMINATION AND RETARDATION.

A wholesome sign of progress in city school work is the wide recognition of the need of greater efficiency in the school system, with the effort to measure present efficiency. It is now generally admitted that there is need of a closer adaptation of the work of the school to the ordinary needs of life. It is believed that the dwindling of classes in the upper grades of our elementary schools, which has been often noted in recent years, indicates weakness in the schools at some point or points, and that a remedy for that weakness should be found and applied. This belief has led to a number of studies of the amount and causes of the elimination and retardation of pupils. Most notable among these are three that were made by Dr. Edward L. Thorndike, Dr. Leonard P. Ayres, and Dr. George D. Strayer, respectively. In 1907 Dr. Elmer E. Brown, then Commissioner of Education of the United States, recognizing the need of an intensive and thorough study of the extent and causes of the withdrawal of pupils from school, engaged Prof. Edward L. Thorndike, of Teachers College, Columbia University, to prepare for the Bureau of Education a monograph on that subject. The result was "Bulletin, 1907, No. 4: The Elimination of Pupils from School," a work which attracted wide attention and marked the beginning of the more recent interest in the subject. In this study Prof. Thorndike's effort was mainly to show the amount of elimination. The results of his investigation are summarized in the following statement:

> I estimate that the general tendency of American cities of 25,000 population and over is, or was about 1900, to keep in school out of 100 entering pupils 90 till grade 4, 81 till grade 5, 68 till grade 6, 54 till grade 7, 40 till the last grammar grade (usually the eighth, but sometimes the ninth, and rarely the seventh), 27 till the first high-school grade, 17 till the second, 12 till the third, and 8 till the fourth.

In 1909 the Russell Sage Foundation of New York City, published[1] a monograph on the retardation and elimination of pupils from school, which presented results materially differing from those obtained by Prof. Thorndike. This difference was due to different methods employed in obtaining the number of pupils entering school in a given year, which number must be found before the amount of retardation can be determined. Prof. Thorndike calculated the number of entering pupils by taking the average of the enrollment in the first three grades and making slight corrections. Dr. Ayres obtained the number entering by applying to present enrollment certain percentages which were obtained by taking into account retardation, elimination, and increase in population. The difference in results as pointed out by Dr. Ayres is shown in the following table:

[1] Ayres, Leonard P., Laggards in our schools. New York, 1909.

Per cent of pupils entering school who continue to the final elementary grade in 16 cities.

Cities.	Thorndike.	Ayres.	Cities.	Thorndike.	Ayres.
Baltimore	14.4	29.3	Minneapolis	32.0	62.4
Boston	47.0	59.3	Newark	25.0	28.0
Chicago	35.0	52.3	New York	33.7	42.6
Cleveland	33.1	47.6	Paterson	19.4	36.1
Denver	44.0	68.8	St. Louis (white)	21.0	42.3
Jersey City	26.4	44.7	Springfield, Mass	38.5	56.6
Kansas City	49.4	67.4	Trenton	30.6	38.0
Los Angeles	45.1	49.7	Wilmington	39.0	65.0

The differences indicated are surprising, but both authors agree that by far too small a percentage of pupils fail to complete the course in the elementary grades, and both have exerted a wide influence on efforts at the measurement of the school's efficiency. It is largely through such studies that the waste places will be found, causes will be discovered, and means will be devised for correcting the school's faults.

Already a decided impetus has been given to the study of the problem, as a perusal of recent annual reports of city superintendents will show. Of about 100 such reports from important cities about one-half discussed elimination or retardation or both. Most of these discussions are illuminating and all represent earnest study; many of them show the amount of elimination and retardation, mention causes, and propose remedies. The causes of withdrawals from school vary with different cities, depending in large measure upon economic and social conditions and upon the general educational spirit of the community, but in general it may be said that there are many elements common to all cities. Supt. Randall J. Condon, of Providence, R. I., found that of 122 grammar-school graduates who did not enter the Providence high schools upon their graduation in February, 1910, "the majority had a definite reason for not attending high school," but "little time or attention had been directed toward their immediate or future work."

In 1909–10, 969 pupils withdrew from the public schools of Covington, Ky. Supt. Homer O. Sluss found the cause of withdrawal of all but 51. He says:

> The statistical table shows that 409, or 9.2 per cent, of the total enrollment and 42.2 per cent of the total number of withdrawals moved out of the city, indicating a large shifting population; 198 withdrew on account of personal illness; 53 because of illness in the family and 5 because of failing eyesight; 25 withdrew because of financial conditions of the home, while 128 others left school to seek employment; 33 withdrew because of indifference; 12 because of failure to secure promotion, and 6 because of incapacity to do the work.

Savannah, Ga., offers an example of the causes of withdrawal in a city in which there is no compulsory education law in force. For the 1,203 withdrawals of white pupils in that city in 1909–10, Supt. Otis Ashmore found the following causes: "Death, 6; ill health, 140; removal from city, 341; transfer to other schools in system, 260;

bad behavior, 52; to go to work, 91; nonattendance, 191: failure to keep up with grade, 55; change of grade, 67."

The foregoing extracts show a decided interest in the study of the causes of elimination; the causes of retardation, though more elusive, have recently received even more attention. One of the most noteworthy studies of these causes was that made by Supt. William H. Maxwell, of New York City. Early in the school year 1909–10 Supt. Maxwell appointed eight committees of principals to study the whole question and report to him. Dr. Maxwell's summary of their findings is worthy of quotation:[1]

The eight committees were in substantial accord in stating that the following are the chief causes of failure on the part of pupils to secure regular promotion from grade to grade. The causes, however, are not stated in any order of intensity:

Irregular attendance, due to poor home conditions; looseness of parental control; ignorance of parents; lack of opportunities for home study; poverty of home requiring pupils' assistance; sickness of other members of the family; lack of proper clothing; feeble health of individual pupils; poverty of surroundings.

Truancy, which is attributed by the principals to three chief causes: Lack of support by the courts in enforcing the compulsory-education law, lack of cooperation of parents, and lack of a sufficient number of attendance officers.

Ignorance of the English language, due to foreign birth and to the fact that English is not the language of the home.

Late entrance into school, due to two causes: The presence of immigrant children, and the fact that many children are sent to private schools before they enter the public schools.

Transfer from school to school.—Such transfers involve loss of time owing to variations in the interpretation of the course of study and syllabuses and in following different sequences of topics in different schools and frequently to delay in entering school after removal from one school district to another school district.

Physical defects.—These are caused or intensified by lack of medical care; nervous troubles; adenoid growths and enlarged tonsils; defective eyes, ears, and teeth; malnutrition; physical precocity; lack of play and exercise; unsanitary conditions.

Sluggish mentality.—Sometimes this feature takes the form of positive mental defect and sometimes it characterizes pupils as slow in receptivity and response. Sometimes it takes the form of moral defects, such as dishonesty, lying, and cheating, which are intensified by improper reading, the following of bad examples, and petty defiance of law in the streets.

Excessive size of classes, which prevents teachers giving necessary individual instruction.

Prolonged or frequent absences of teachers, during which their classes are taught by substitutes who are sometimes indifferent and sometimes inefficient.

Part time, which prevents pupils from doing the work of the lower grades thoroughly.

Varying standards of rating pupils.—Some principals and teachers adopt too high a standard; some too low a standard.

Inefficient teaching, due to teachers' talking and doing too much for their pupils; lack of thoroughness; obsolete aims and methods in teaching on the part of some of the older teachers; occasional lack of the power of discipline; neglect of opportunity afforded by the study period to teach children how to study.

Improper methods of promotion, due to unnecessarily holding back pupils; not making promotions with sufficient frequency; and to differing standards of promotion.

[1] Twelfth annual report of the city superintendent of schools, to the board of education of the City of New York for the year ending July 31, 1910, pp. 80–81.

The latest comprehensive study of the subject of elimination and retardation is that embodied in Bulletin, 1911, No. 5, of the Bureau of Education, entitled "Age and grade census of schools and colleges," by Dr. George D. Strayer, of Teachers College, Columbia University. Dr. Strayer obtained the number of entering pupils by assuming that number to be approximately equal to the number in the largest age group in any one grade, found from an age census taken in 1908 at a time when a practically normal number of pupils were present. Proceeding on this assumption he obtained results which show a high rate of elimination and retardation. His conclusions for the elementary grades are contained in the following quotation:

> In general it may be said that there is relatively little elimination during the first four grades. The amount of elimination for these grades will, however, vary greatly among the several cities. From the fifth grade on elimination becomes a prominent factor, reducing the number of children in a grade, especially the number of repeaters. It will be noticed that the median per cent of the largest age group found in the fifth grade varies from 95 to 100. This does not mean that 95 per cent of the total number of children who enter school during the year equals the number of children who enter the fifth grade during this year, but rather that the number of the children entering the grade plus those who are repeating it amount to from 95 per cent to 100 per cent of the number entering school during the current year. These figures indicate the median, and it must be remembered that in half the cities there were less than this per cent in the grade, and that in half the cities more than this per cent were found in the fifth grade. For the sixth, seventh, and eighth grades it would seem, from careful study of a few cities recently made by graduate students in Teachers College, Columbia University, that a fair estimate of the number of repeaters in the sixth, seventh, and eighth grades would be 12 per cent of the total number in the grade for the sixth grade, 10 per cent for the seventh grade, and 8 per cent for the eighth grade. If these corrections are applied to the tables given above, it is possible to estimate fairly accurately the elimination in these grades. For example, omitting repeaters, the percentage of boys in cities of more than 25,000 population in the entering group who actually enter a sixth grade would be represented by a median of 73 per cent; the seventh grade by a median of 55 per cent; while the eighth grade would show a median of approximately 42 per cent. That is, in half of the cities we might expect to find less than 73 per cent of the entering group who have actually entered the sixth grade during the current year, while in half the cities the percentage would be larger. For one-half of the cities 55 per cent or less of the number entering school entered the seventh grade during the current year, and for one-half of the cities 55 per cent or more of the entering group entered the seventh grade during the same year. For the eighth grade the point of division falls at 42.

Such studies as have been indicated here should result in a better and more general understanding of the whole question of the school's efficiency or inefficiency, and in the end will make for a proper adjustment of the school to meet the demands of the community.

PROFESSIONAL INVESTIGATIONS.

Another method of approach to the task of measuring the school's efficiency is to be seen in the recent investigations of individual city systems by professional educators or experts. Two such investigations have marked the year 1911, one in Baltimore and the other in New York City.

At a meeting on January 25, 1911, the board of School commissioners of the city of Baltimore adopted a resolution providing "that the committee on rules, curriculum, and textbooks be, and it is hereby, directed to employ a commission of three disinterested and competent persons to investigate and report upon the system of instruction now in force in the public schools of Baltimore city and to spend a sum not exceeding $2,000 for this purpose." Pursuant to the provisions of the resolution the committee secured the services of Dr. Elmer Ellsworth Brown, Commissioner of Education of the United States; Dr. Ellwood P. Cubberley, professor of the theory and history of education in the Leland Stanford Junior University, and Dr. Calvin N. Kendall, superintendent of schools, Indianapolis, Ind., as members of the commission. The commission and their assistants, Mr. M. B. Hillegas, editor in the Bureau of Education, and Dr. Harlan Updegraff, specialist in school administration in the same bureau, spent several weeks during the spring and early summer studying conditions in Baltimore and comparing data obtained from the study with those of other cities of the same class. The results of the study are embodied in Bulletin, 1911, No. 4, of the United States Bureau of Education. Summarized, the conclusions of the commission are as follows:

(1) That the system of school administration under the charter of 1898 is preferable to that of the older charter, under which the members of the larger school board were chosen by the city council, there being one member from each ward.

(2) That expenditures for schools in Baltimore are comparatively low.

(3) That, while there is ground for adverse criticism at some points in the system, in general the schools of Baltimore are "moving in the right direction."

(4) That, generally speaking, the teaching force is efficient, but that the system of promotional examinations should be maintained.

(5) That the corps of supervisors is insufficient in number.

(6) That the teachers should receive higher salaries.

(7) That the course of study and time schedule should be revised at some minor points.

(8) That the general discipline in the schools is good and that coeducation of the sexes in the elementary schools, to which some objection had been made in Baltimore, is general in the larger cities.

(9) That many of Baltimore's schoolhouses are in an unsatisfactory condition.

A similar study of an individual school system is that of the New York City schools, which is in progress at the time of this writing. This investigation was begun in June, 1911, under the direction of the board of estimate of the city, and is under the supervision of Dr. Paul H. Hanus, professor of the history and art of teaching in Harvard University. The university has granted Prof. Hanus a year's leave of absence, and the greater part of the period is to be devoted to the investigation. One of the main purposes of the city authorities in securing the services of an educational expert to study their

schools was that the course of study might be examined in all its phases and if possible made more practical. Another object in view was that the system of administration, including professional control, might be subjected to close constructive criticism. This effort in New York accentuates the growing conviction that a closer adaptation of school work to the ordinary needs of life is necessary.

TESTING THE PRODUCT.

A third side from which the measurement of the school's efficiency has been approached is represented by the effort to establish a standard of attainment for the average child in each grade. How much arithmetic should the average child in the fourth grade, or any other grade, know? How much geography should he know? How much spelling? How much arithmetical or spelling ability should he possess? It is to these questions that an answer is sought by those who would set up standards of attainment by which the product of the schools may be measured.

One of the earlier efforts in this direction was a study made by Dr. Cliff W. Stone,[1] then fellow in Teachers College, Columbia University, and now professor in the State Normal School, Farmville, Va. Dr. Stone's purpose was indicated by the two questions to which he directed his attention: "(1) What is the nature of the product of the first six years of arithmetic work? (2) What is the relation between distinctive procedure in arithmetic work and the resulting abilities?"

Through the cooperation of superintendents and principals a series of tests was made of the arithmetical abilities of pupils in the 6A grade in 26 school systems. These tests were given in both fundamental operations and reasoning, and the scores made were tabulated. From the figures thus obtained were computed median scores which may serve as standards for the measurement of arithmetical abilities in 6A grade in any school system.

In 1910 Prof. Edward L. Thorndike, of Teachers College, Columbia University, published a monograph on handwriting, similar in purport to that of Dr. Stone on arithmetical abilities. His purpose was "to describe the means by which a graphometer or scale for handwriting may be made, to present such a scale for the handwriting of children in grades 5, 6, 7, and 8, to explain how such a scale is to be used, to present a similar scale for adult women's handwriting, and to mention some of the facts and questions of importance to which the discovery and use of these scales have led." Following this pur-

[1] Stone, Cliff Winfield. Arithmetical abilities and some factors determining them. Columbia University Contributions to Education, Teachers College Series. New York, 1908.

pose, Dr. Thorndike proceeded to the determination of a standard through a number of ratings by different judges of 1,000 samples of children's handwriting. Some 18 different groups, or qualities, were conceived and the samples were rated as belonging to one or another of these groups, each group being considered slightly better than the next lower and slightly inferior to the next higher. By rating samples as belonging to one or another of a long series of qualities, Dr. Thorndike maintains that a more accurate classification is secured than would be with a haphazard rating, and in this way a fairly accurate standard can be had.

A more recent effort, and one designed to secure a wider range of data, is that now being made by Mr. S. A. Courtis, head of the department of science and mathematics in the Detroit (Mich.) Home and Day School. Like Dr. Stone, Mr. Courtis seeks a standard of measurement of arithmetical abilities.

IV. UNIFORMITY IN STATISTICS.

For years the need of uniformity of methods in the collection of statistics and of the standardization of units of measurement has been felt. In some of the earlier reports of the National Education Association may be found discussions of this need. The latest effort, and that which is already well under way toward some measure of attainment, has been that of the Bureau of Education working in conjunction with the Department of Superintendence of the National Education Association, the Bureau of the Census, and the National Association of School-Accounting Officers.

At a meeting of the Department of Superintendence in Indianapolis, in February, 1910, a committee on uniform records and reports was appointed and instructed to report at the next meeting of the department. This committee was composed of Hon. Payson Smith, State superintendent of public instruction of Maine, chairman; Dr. George D. Strayer, of Teachers College, Columbia University; Mr. William H. Elson, superintendent of city schools, Cleveland, Ohio; Mr. E. C. Warriner, superintendent of city schools, Saginaw, Mich.; and Mr. Charles M. Lamprey, director of the model school of the Boston Normal School.

At the suggestion of school-accounting officers in several important cities of the country and upon invitation by the Commissioner of Education, a number of such accounting officers and other experts in fiscal statistics met on May 17, 1910, at the Bureau of Education in Washington and organized the National Association of School-Accounting Officers. A committee on standardization was appointed, and it was decided to cooperate with other agencies for the purpose of securing uniformity in school accounting and reporting.

Among those present at the organization of this association were three representatives of the Bureau of Education, the same number from the Bureau of the Census, and two members of the committee of the Department of Superintendence. At this meeting impetus and direction were given to the movement for uniformity of fiscal statistics.

In May and in December, 1910, and again in January, 1911, conferences were held by the representatives of the organizations named, at which two lines of work were mapped out—one looking toward the preparation of a system of record cards to be used by teachers and local school authorities in securing the basal data for attendance statistics and the like; another, looking toward the preparation of a schedule to be used generally in the collection of fiscal statistics. The object in preparing the record card was to provide means by which the records made by teachers in the schoolroom could be expressed in common terms, for, it was pointed out, the very foundation on which all attendance statistics must be based is faulty unless the records made by teachers are reduced to some common standard. The object in preparing the fiscal schedule was twofold: (1) To secure uniformity in accounting and in the collection of fiscal statistics, in order that such statistics might be made of more value for purposes of comparison, and (2) to show items of cost by types of schools and by function.

Tentative forms of both record cards and fiscal schedules were agreed upon at the conferences, and the Bureau of Education undertook to send them out to school officials for their opinions and suggestions. As results of this referendum, a large majority of the school officials of the country were shown to favor the plan, and valuable suggestions were received, which were taken into account in the final draft of the forms.

The forms as agreed upon as a result of the conferences and the submission to school men for suggestion were reported by the committee to the Department of Superintendence at its meeting in Mobile, Ala., in February, 1911, and were recommended for use. The report was adopted by the department. The Bureau of Education sent out for approval a complete system of record keeping, comprising a series of five cards. The committee, however, made report on only the first of the series, but will make further report at the next meeting of the department. The cumulative record card, which is card No 1 of the series, follows.

[OBVERSE.]

1. 1. Last name.	2. First name and initial.		ELEMENTARY SCHOOL RECORD SYSTEM—ADMISSION, DISCHARGE, AND PROMOTION CARD.
3. Place of birth.	4. Date of birth.	5. Vaccinated.	To be kept for every pupil and sent with the pupil when he is transferred to any school, either public or private, in the city or outside the city. Great care should be used to have the names COMPLETE and CORRECT. Write all dates as follows: 1912–9–25.
6. Name of parent or guardian.	7. Occupation of parent or guardian.		

8. Residence. (Use one column at a time. Give new residence when pupil is transferred.)		9. Date of discharge.	10. Age.	
			Years.	Months.

When a pupil is permanently discharged to work, to remain at home, or because of death, permanent illness, or commitment to an institution, this card is to be returned to the principal's office and a full statement of the cause of the pupil's discharge is to be made in the blank space remaining above.

[REVERSE.]

ELEMENTARY SCHOOL RECORD SYSTEM—PROMOTION RECORD.

This card is to pass from teacher to teacher or from school to school as the pupil is promoted or transferred. It is to be filled out and sent to the principal's office when any change is made requiring a change in the office records. It is then to be sent to the teacher who has the pupil.

a	b	c		d	e	f	g	h	i
School.	Date of admission.	Age Sept. 1.		Grade.	Room.	Days present.	Health.	Conduct.	Scholarship.
		Years.	Months.						

The wide circulation of this form of record card by the Bureau of Education and its adoption by the Department of Superintendence have given decided impetus to the use of such a system. During the past few months this office has received many inquiries relative to it and many requests for samples. When it is in general use a long step will have been taken toward the standardization of attendance statistics.

The form of fiscal schedule for use in city school systems as adopted by the Department of Superintendence and modified in minor details is presented in the chapter devoted to city school systems in the second volume of this report. This form has been sent out this year for the double purpose of securing the statistics for the fiscal year 1910–11 and to lead school authorities to adopt a system of accounting in conformity with it.

Explanatory of the schedule a list of definitions was prepared and sent to school officers receiving the schedule. The more important of these definitions had received consideration by the participants in the conferences mentioned above. While they were intended merely to explain the items of the schedule, taken with the schedule itself they will serve to show in outline the system of school accounting necessary to secure uniformity in fiscal statistics in accordance with the plan agreed upon by the several agencies working to that end. A large number of school officials have already signified their intention to modify their systems of accounting to conform with the fiscal schedule described.

V. THE PHYSICAL WELFARE OF SCHOOL CHILDREN.

There is probably no subject in all the field of educational thought that has engaged more of the attention of school men in recent years than the physical welfare of school children. The conviction is growing that the school should minister to the physical as well as to the mental side of the child and that physical soundness in children makes for efficiency in study. That physical defects are potent factors in producing irregular attendance, truancy, backwardness, and withdrawal from school is now generally understood, and school authorities are endeavoring to discover, if not to correct, these defects. Efforts in behalf of the health of school children have been marked by the introduction of medical inspection, the improvement of sanitation and school hygiene, and the provision of special rooms and schools for the more pronounced types of the physically unfortunate.

MEDICAL INSPECTION.

As early as 1890 San Antonio, Tex., gave some expert medical attention to the schools. In that year an epidemic of smallpox broke out in the city and necessarily the attention of the board of

health was required among school children. The board of "sanitary inspectors" cooperated with the school authorities in stamping out the disease, and since that time medical attention to the schools has been continued. But it was in Boston, Mass., which began medical inspection in 1894, that impetus and direction were given to the movement. In his annual report for 1895 Supt. Edwin P. Seaver, after giving the number and character of contagious diseases discovered and isolated, said:

> The other diseases discovered and for which the necessity for treatment was pointed out were are follows: Abscess, 22; catarrh, 244; cellulitis, 12; chorea, 11; colds with more or less bronchitis, 224; debility, 63; diseases of the eye, 389; diseases of the ear, 35; diseases of the skin and scalp, 186; diseases of the throat and mouth, 3,489; epilepsy, 5; fracture of collar bone, 1; headache, 171; indigestion, 42; malaria, 17; nausea, 50; Pott's disease, 3; swollen glands, 133; ulcers, 16; wounds, 21; miscellaneous diseases, 411; examined for vaccination, 117.

From this statement of Supt. Seaver it is evident that the system of inspection as begun in Boston did not differ materially in purpose and scope from that now in practice in many cities.

From these early beginnings the movement for the medical inspection of school children spread, until in 1911 the department of child hygiene of the Russell Sage Foundation, which has made the most recent and thorough statistical study of the subject[1] found that of 1,038 cities reporting, 443 had medical inspection. According to the same report there were only 23 such cities in 1902. The figures for the year 1911 show that most progress has been made in the cities of the North Atlantic and Western Divisions. Of those reporting, the percentage of cities having medical inspection was as follows: North Atlantic Division, 58 per cent; South Atlantic, 31 per cent; South Central, 35 per cent; North Central, 29 per cent; Western, 57 per cent. Of the 50 cities having a population of 100,000 or over in 1910, 48 reported to the Russell Sage Foundation and 45 of this number had medical inspection.

In its earlier beginnings the work of inspection was generally under the supervision of boards of health, but in more recent years control has largely shifted to the educational authorities. On this point the Russell Sage Foundation finds that of the 443 cities reporting inspection in 1911, 337 report administration by the board of education and 106 by the board of health.

Medical inspection varies in scope and completeness. In some cities little more than the detection and isolation of contagious diseases is attempted, while in the more elaborate systems regular examinations of all children are made at intervals and with a view to discovering all forms of ailments. Teeth, eyes, ears, nose, throat, lungs, and other parts of the body are examined and diagnoses made accordingly. The most general practice is to notify parents

[1] Russell Sage Foundation. What American cities are doing for the health of school children. New York, 1911.

when some ailment is discovered, but in some cities clinics are established for the free treatment of children whose parents are unable to provide proper medical attention. School nurses are employed in a number of cities to follow up the work of the examining physician by visitation of homes and cooperation with both school authorities and parents. The following statement, quoted from the annual report for 1910 of Supt. Frank B. Dyer, of Cincinnati, Ohio, is a good description of a well-organized medical inspection system in a large American city:

In Cincinnati the medical inspection of schools is conducted by the board of health, who instituted it on January 1, 1907. The district physicians serve as a corps of inspectors. Their duties are to examine and report upon the sanitary condition of each school and yard, and to put themselves into communication with the principals of their respective schools each day. All pupils whom the principal or teacher considers in need of medical attention are referred to these inspectors. The recommendations of the inspectors are carried out by the principal, who notifies parents or guardians and excludes from school when directed. When home treatment is not given according to suggestions, the school nurse follows up the case and secures home cooperation. A daily notice is sent to each school by the board of health, giving information concerning all the children of the city who are excluded for contagious diseases, and also a list of those who are permitted to return. There are 25 medical inspectors and 5 nurses. The number of visits made by medical inspectors during the year 1909–10 was 4,207; number of pupils examined, 22,932; number excluded from school, 1,606. The work of the nurses is found to be of great importance, and the present number is inadequate to meet the needs. In a great many cases the home pays but little attention to the recommendation of the medical inspector unless the nurse follows up the case and secures proper attention. In at least 85 per cent of the cases visited by the nurses the cooperation of the home has been secured. The system is growing in efficiency year by year, and has now been extended to include the parochial schools of the city.

A phase of inspection that has received especial emphasis in recent years is the examination of teeth. Such examinations are usually inaugurated by a society of dentists in the city, and in most cities where found are still conducted by such societies. The general practice is to examine the teeth, chart the results, and send appropriate recommendations to parents. In several cities free dental clinics are maintained for the treatment of children of indigent parents.

Of 36,403 children examined in Cleveland, Ohio, in March, 1909, 76.7 per cent were found to have teeth more or less defective. Of 5,514 similarly examined in Cincinnati in 1910, only 958 were found with no defect. If these two cities may be taken as typical, the need of dental inspection in schools is palpable.

SCHOOL HYGIENE.

Phases of school hygiene that have been of the most interest in the past few years have been the movement to abolish the common drinking cup, the provision of better equipment for the elimination

of dust and dirt, and the installation of more hygienic school furniture. Here again the report of the Russell Sage Foundation contains the latest information that approaches completeness.

To displace the old drinking cup, which was used by all in common and which has been considered frequently responsible for the spread of disease, have come the individual drinking cup and the bubbling fountain from which thirst can be quenched without the use of an accessory vessel. The larger percentage of the cities from which reports were received supply at least a part of their schools with sanitary drinking fountains. The following brief summary shows to what extent the common cup has been abolished:

Number of cities where the schools are supplied with sanitary drinking fountains and individual drinking cups.

Divisions.	Number of cities supplying individual drinking cups.	Number of cities supplying sanitary fountains.
North Atlantic	97	316
South Atlantic	20	54
South Central	38	67
North Central	97	286
Western	12	62
United States	264	785

Provisions for the elimination of dust and dirt are to be found in the form of moist cloths, dust-absorbing compounds for sweeping, and vacuum cleaning appliances. The Russell Sage Foundation reports that 643 of the 1,038 cities reporting use moist cloths and that 894 use dust-absorbing compounds. In 87 cities vacuum cleaners are used. By these means the dust and dirt are entirely removed instead of merely stirred up by the old-fashioned broom and feather duster.

The following table shows the extent to which adjustable desks are used:

Number of cities having adjustable desks in their schools.

Divisions.	Number having adjustable desks.	Per cent having adjustable desks.
North Atlantic	257	63
South Atlantic	15	20
South Central	25	25
North Central	105	28
Western	26	37
United States	428	41

In order to show the status of medical inspection and schoolroom hygiene in the country at the present time, the summary prepared by the Russell Sage Foundation is presented here in full. When it

is considered that in 1905 there were only 55 cities in the country having medical inspection, and that in a large percentage of these the system was imperfectly organized, some idea of the recent progress in the matter of caring for the health of school children can be had. The table shows, by States and for the country as a whole, the present status of both medical inspection and school hygiene.

Summary of provisions for health of children in public schools, 1911.[1]

States.	Number of cities reporting.	Having medical inspection.	Inspection for contagious diseases.	Vision and hearing tests by teachers.	Vision and hearing tests by doctors.	Physical examination by doctors.	System under board of health.	System under board of education.	Number of school doctors.	Number of school nurses.	Inspection by dentists.
United States	1,038	443	405	552	258	214	106	337	1,415	415	69
North Atlantic Division	411	236	224	261	125	135	58	178	852	261	24
South Atlantic Division	74	23	23	29	12	10	7	16	48	11	8
South Central Division	101	35	34	43	23	12	12	23	41	5	3
North Central Division	382	109	93	182	73	38	21	88	417	114	30
Western Division	70	40	31	37	25	19	8	32	57	24	4
North Atlantic Division:											
Maine	19	8	6	18	4	4	.....	8	13	.....	2
New Hampshire	12	3	2	7	3	2	1	2	11	1	1
Vermont	7	.....	1	7	.....	.....	.....	.....	.....	.....	.....
Massachusetts	108	107	103	104	2	57	23	84	348	49	9
Rhode Island	16	8	7	5	6	22	3	5	20	1	1
Connecticut	25	15	15	21	7	5	11	4	26	7	1
New York	77	20	22	51	17	13	12	8	197	160	4
New Jersey	47	47	47	12	45	40	.....	47	117	30	2
Pennsylvania	100	28	21	36	21	12	8	20	120	13	4
South Atlantic Division:											
Delaware	1	1	1	1	1	.....	1	.....	18	.....	1
Maryland	5	1	1	.....	1	1	1	.....	5	5	.....
Virginia	13	4	4	8	2	2	1	3	12	1	1
West Virginia	10	2	3	2	.....	1	.....	2	1	1	.....
North Carolina	15	5	4	12	1	1	.....	5	3	.....	4
South Carolina	11	4	4	1	3	4	1	3	5	.....	1
Georgia	13	5	5	2	3	1	2	3	4	4	.....
Florida	6	1	1	3	1	.....	1	.....	.....	.....	1
South Central Division:											
Kentucky	19	7	6	7	5	1	2	5	9	2	2
Tennessee	6	4	3	4	3	2	2	2	2	.....	1
Alabama	9	3	3	3	3	3	.....	3	3	2	.....
Mississippi	6	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
Louisiana	8	3	3	4	2	1	1	2	6	.....	.....
Texas	31	10	11	14	5	2	3	7	8	.....	.....
Arkansas	9	3	3	3	1	.....	2	1	4	1	.....
Oklahoma	13	5	5	6	4	3	2	3	9	.....	.....
North Central Division:											
Ohio	68	12	9	28	9	5	1	11	67	24	8
Indiana	51	12	10	31	7	4	4	8	41	.....	4
Illinois	53	14	12	22	9	5	4	10	113	45	3
Michigan	42	19	16	24	12	5	3	16	78	14	5
Wisconsin	41	14	10	27	9	6	3	11	37	6	3
Minnesota	24	9	8	10	8	5	2	7	23	13	1
Iowa	29	6	8	15	4	1	.....	6	3	6	.....
Missouri	24	10	8	7	7	4	1	9	50	5	3
North Dakota	6	1	1	3	1	.....	.....	1	.....	.....	.....
South Dakota	6	2	2	3	1	.....	1	1	.....	.....	2
Nebraska	12	4	4	4	4	2	.....	4	3	1	.....
Kansas	26	6	5	8	2	1	2	4	2	.....	1
Western Division:											
Montana	6	.....	.....	2	.....	.....	.....	.....	.....	.....	1
Wyoming	3	1	.....	1	1	.....	1	.....	.....	.....	.....
Colorado	12	9	4	11	3	3	.....	9	1	1	.....
New Mexico	3	2	2	1	1	.....	1	1	3	.....	.....
Arizona	4	2	2	3	.....	.....	1	1	1	.....	.....
Utah	4	3	3	3	2	2	.....	3	3	.....	.....
Nevada	1	1	1	1	1	.....	.....	1	1	.....	.....
Idaho	3	.....	.....	3	.....	.....	.....	.....	.....	.....	.....
Washington	10	7	6	3	5	3	1	6	22	8	1
Oregon	5	2	2	2	1	1	2	.....	5	1	1
California	19	13	11	7	11	10	2	11	21	14	1

[1] Russell Sage Foundation. What American cities are doing for the health of school children. New York, 1911.

Summary of provisions for health of children in public schools, 1911—Continued.

States.	Regular outdoor recesses.	Recesses in all elementary grades.	Schools having individual drinking cups.	Schools having sanitary fountains.	Moist cloths for dusting.	Dust absorbing compounds for sweeping.	Schools having vacuum cleaners.	Adjustable desks.	Instruction on alcohol and tobacco.	Instruction on tuberculosis.	Instruction on first aid.
United States	947	929	264	785	643	894	87	469	982	649	592
North Atlantic Division	346	333	97	316	237	349	33	275	388	264	223
South Atlantic Division	72	71	20	54	44	61	4	17	65	44	32
South Central Division	100	98	38	67	66	88	4	28	92	66	59
North Central Division	363	361	97	286	243	337	37	120	374	238	238
Western Division	66	66	12	62	53	59	9	29	63	37	40
North Atlantic Division:											
Maine	19	19	6	11	7	17	.....	13	19	8	7
New Hampshire	13	13	1	10	9	11	.....	9	11	11	8
Vermont	6	5	2	5	4	7	.....	6	7	2	4
Massachusetts	102	101	39	99	65	93	7	100	103	96	56
Rhode Island	14	14	9	10	8	13	.....	16	15	12	6
Connecticut	24	21	5	23	10	21	6	23	23	18	14
New York	47	50	9	57	46	67	7	32	72	42	43
New Jersey	43	36	3	38	29	37	6	37	45	32	31
Pennsylvania	78	74	23	63	59	83	7	39	93	43	54
South Atlantic Division:											
Delaware	1	1	.....	1	1	1	.....	1	1	1	1
Maryland	5	5	1	2	4	3	.....	1	5	2	2
Virginia	13	13	2	9	11	12	1	4	12	8	5
West Virginia	8	7	3	8	7	9	.....	2	10	8	4
North Carolina	15	15	4	10	7	14	.....	5	13	12	5
South Carolina	11	11	1	9	4	8	.....	.....	6	6	3
Georgia	13	13	4	9	5	11	1	2	12	4	8
Florida	6	6	5	6	5	3	2	2	6	3	4
South Central Division:											
Kentucky	19	19	5	13	12	19	.....	6	16	13	11
Tennessee	6	6	.....	5	1	5	.....	1	5	4	3
Alabama	9	9	4	5	6	8	1	7	9	4	4
Mississippi	5	5	1	3	3	5	.....	1	3	3	.....
Louisiana	8	8	4	8	6	6	1	4	8	7	6
Texas	31	31	9	21	26	27	1	5	30	19	20
Arkansas	9	8	4	6	6	8	.....	3	8	8	7
Oklahoma	13	12	11	6	6	10	1	1	13	8	8
North Central Division:											
Ohio	61	59	17	43	33	58	6	25	63	33	40
Indiana	48	50	12	40	36	37	6	16	48	28	26
Illinois	55	54	10	32	39	48	5	21	56	31	41
Michigan	40	39	8	36	26	37	5	11	42	36	28
Wisconsin	38	40	9	40	26	40	8	25	41	39	31
Minnesota	22	21	7	17	17	23	2	7	23	14	13
Iowa	27	25	10	23	16	27	1	10	29	16	13
Missouri	23	23	6	13	16	20	2	.....	23	16	15
North Dakota	6	6	2	5	5	5	.....	1	6	5	5
South Dakota	6	6	2	6	5	6	.....	2	6	4	6
Nebraska	11	12	3	11	7	12	.....	1	12	2	5
Kansas	26	26	11	20	17	24	2	1	25	14	15
Western Division:											
Montana	6	5	1	5	4	3	1	3	6	3	2
Wyoming	1	1	1	2	1	2	.....	.....	2	.....	1
Colorado	12	11	3	9	9	10	.....	3	10	6	8
New Mexico	3	3	2	2	2	3	.....	1	3	3	3
Arizona	4	4	1	3	2	3	1	2	4	2	1
Utah	4	4	2	4	4	4	.....	1	3	1	2
Nevada	1	1	.....	1	1	.....	1	1	1	1	1
Idaho	2	3	.....	3	3	2	.....	2	3	2	2
Washington	10	10	.....	10	4	9	3	5	10	5	5
Oregon	5	5	.....	5	5	5	1	2	5	2	3
California	18	19	2	18	18	18	2	9	16	12	12

VI. SECONDARY EDUCATION.

RELATION TO HIGHER EDUCATION.[1]

Within the past half dozen years there has been a revival of the old-time controversy over the relations of secondary schools to universities and colleges. Pointing out a conflict between the needs

[1] See Chapter II of this report.

of the community and the requirements of the college, high-school men are urging that the college make its entrance standards more flexible, while college men, with characteristic conservatism, have shown a disposition to proceed in this direction with caution. That there is need of an adjustment to the end that secondary schools may direct their efforts to other purposes besides preparing their students to meet college entrance requirements seems to be generally agreed. In this connection the Commissioner of Education, in the introduction to his annual report for 1910, said:

> There are two considerations of a general character which are central to this whole problem: In the first place, it is not merely a demand of the universities, but a genuinely popular demand that our high schools should bridge the gap between the grammar schools and the colleges, offering to all pupils a well-articulated series of educational opportunities, from the lowest to the highest. In the second place, where the standards of secondary education are uncertain and fluctuating, the colleges must fix their own standards of admission or give up the hope of maintaining an honorable position in the academic world.
>
> The historic situation, in which our secondary schools have been held up to a creditable grade of excellence by the admission requirements of the colleges has, then, been amply justified in the past. It is not yet outgrown. But every year it becomes more unsatisfactory, in spite of many incidental improvements made in the past generation, and we must now look forward to a time when it can be superseded by some different arrangement, which shall be as good for the colleges and better for the schools.

The question centers now more in the content than in the amount of requirements. High-school men find it difficult to adjust the work of pupils preparing for college to the work of those who do not mean to go beyond the secondary school and who desire a more practical training. This difficulty can be met in part, they say, by making broader the field of college entrance requirements.

At present there is a decided tendency on the part of college men to meet the demands of the secondary schools. At the meeting of the Association of New England Colleges held at Amherst in November, 1910, the following resolution was adopted: "That the association recommends that the New England colleges adopt a system of tests for admission in which a certificate shall be taken for quantity and an examination shall be held in a limited number of substantial subjects for the quality of school work." In accordance with this recommendation, Harvard University, in January of the present year, modified its entrance requirements by adopting an alternative plan of admission to be tried in conjunction with the older plan. About the same time the University of Chicago, after an extended study of the problems involved, announced rather radical changes in its requirements. Other large universities that have modified their entrance standards within recent years are Columbia University, the University of Wisconsin, and the University of California.

EXTENSION OF THE HIGH-SCHOOL CURRICULUM.

The tendency toward the extension of the high-school curriculum has been more marked during the last decade than before. The diversity of social and industrial demands upon the high school has made necessary the extension of the range of its activities. To meet this necessity have arisen the technical high school, commercial courses, courses in household economy, and the like. In recent years these types of high-school activity have made rapid headway.

The most elaborate system of secondary education in the country is that worked out and put into effect in the city of Chicago in the early part of this year. In that city 11 distinct four-year courses and 10 two-year courses are now offered. The four-year courses are as follows:

1. English course.
2. General course.
3. Foreign-language course.
4. Science course.
5. Normal preparatory course.
6. Business course.
7. Manual-training course.
8. Builders course.
9. Household-arts course.
10. Arts course.
11. Architectural course.

The general course is designed to give a general education rather than a high degree of specialization. It is the preparatory course for colleges and for normal, engineering, and scientific schools. The other 10 courses in the four-year group are designed for specialization in the lines indicated by the titles. In the English course, for instance, the major work is done in English literature and composition; in the foreign-language course the major work is done in foreign languages.

The two-year courses are all vocational in aim. They are in accounting, stenography, mechanical drawing, design, advanced carpentry, pattern-making, machine-shop work, electricity, household arts, and printing. Of these courses the prospectus of courses of study for the Chicago high schools says:

> Each two-year course has a major subject, which receives a specially larger proportion of time and credit. A student pursuing such a course will be required to follow it as outlined, in order to be well fitted for the occupation into which the major subject leads. Studies taken successfully in the two-year courses will receive credit toward graduation from the four-year course.

JUNIOR HIGH SCHOOLS.

A new departure in secondary education in this country is the adoption in some cities of a modification of the older "six and six plan," in the form of "junior high schools." For some years there has been advocated the plan of drawing the line of demarcation between elementary and secondary education at the end of the sixth year, or grade, and in a number of cities departmental teaching has been tried with success in the upper elementary grades, but it was

not until 1909 that this tendency took definite form in a separate school. On July 6 of that year a resolution was adopted by the board of education of Columbus, Ohio, directing Supt. J. A. Shawan to organize the new Indianola school as a junior high school, and the school was organized accordingly. In the same year Supt. Frank F. Bunker, of Berkeley, Cal., introduced the same type of school in that city, and from Supt. Bunker's initial effort the "Berkeley plan" has become widely known.

The plan involves the combination of the two upper elementary grades with the first year of the high school. This would leave in the elementary school the first six grades, and the high school proper would be composed of the three upper years. The plan contemplates the doing of preparatory high-school work under practically high-school conditions and is designed to make less abrupt the passage from the elementary to the secondary school. As showing more in detail the plan submitted by Supt. Bunker, the following quotation is taken from his report relative to the proposed school.[1]

> The plan which I have recommended involves a reorganization and regrouping of the several grades of our schools. Stated briefly, it is this: To have three groups of schools, one group (the high schools proper) comprising the tenth, eleventh, and twelfth years only; the second group, which may be called the introductory high-school group, comprising the seventh, eighth, and ninth years only; and a third group of schools (the elementary schools proper) comprising all children of the first six years. To make it more concrete, the plan proposes, when in full operation, that all the seventh, eighth, and ninth grade children of the entire department be assembled at certain schools which shall be organized for work of this character; that the work of the ninth year be no longer done at the high school proper, but at these centers; and that the other schools of the department comprise grades no higher than the sixth grade, the same to be feeders to the centers.

VII. SPECIAL SCHOOLS AND CLASSES FOR EXCEPTIONAL CHILDREN.

Under the head of "Studies of elimination and retardation" mention has already been made of the retarded child. Supt. Maxwell's enumeration of the causes of retardation is not only illuminating, but it also abounds with suggestions of remedies. Some of these causes clearly indicate that the regular grade work is not adapted to the needs of a large percentage of exceptional children, and that special, or extra-grade, classes should be organized. If the exceptional child can not be dealt with in the regular classes of the grades, some special provision should be made for him in a school or class suited to his needs.

Though provision for the education of the deaf and blind was made in this country as early as the beginning of the nineteenth century, it was not until the last decade of that century that provision for other kinds of atypical children began to attract wide attention. The proper administration of compulsory education laws, the greater

[1] Sierra Educational News and Book Review, December, 1909, pp. 13–19.

number of which were enacted in the seventies and eighties, necessitated the establishment of truant schools or classes. Cleveland, Ohio, led the way with the organization of disciplinary classes in 1878 and Chicago followed in 1892, and thereafter many other cities made similar provisions. In the late nineties and the earlier years of this century the "retarded" child began to attract especial attention, and special classes to meet his needs made their appearance in the American city school system. Pioneer cities in this field were Providence, Boston, and Springfield (Mass.), New York City, Philadelphia, and Cleveland. In more recent years special classes have been organized for the tuberculous and anæmic, the exceptionally capable, those having speech defects, and those for whom vocational training is better adapted.

OPEN-AIR SCHOOLS.

The first city in the country to establish an open-air school for tuberculous and anæmic children was Providence, R. I., where such a school was opened February 1, 1908. Since that time the movement has spread to all parts of the country. In 1911, 25 cities reported open-air schools. Among them are such leaders in educational endeavor as Boston, New York, Rochester, Newark, Pittsburgh, Chicago, Cincinnati, Oakland, and New Orleans.

Supt. Maxwell, of New York City, suggests for equipment, venetian blinds for the windows, movable and adjustable desks, reclining chairs, a scale for weighing and measuring pupils, and clothing consisting of robes, caps, and foot warmers. To this might be added utensils for the preparation of soup and wholesome lunches. The following description, taken from the annual report for 1910 of the board of school visitors of Hartford, Conn., will serve as typical of the open-air school as at present conducted:

> On the morning of January 3, 1910, the first out-door school in Connecticut was opened. It was rainy, cold, and disagreeable, but 23 children registered, and after each had been equipped with reefers, sweaters, toques, and sitting-out bags, they began actual school work in the tent provided. The change from warm homes and schoolrooms to an open tent on such a cold day must have been trying to some of the children, but no murmur of discontent, grumbling, or whining was heard that day, and the same spirit of cheerfulness prevailed during the entire six months of the school. The children were selected from 13 different schools and from 10 different nationalities and numbered 47 before the season closed. When children had gained sufficiently, or home conditions had materially improved, children were sent home at first, but later it seemed best to retain them as long as possible, in order to test not only the health-giving scheme of the school but the educational side as well. All children entering were selected from groups selected from schools, and examined by Dr. Stoll. They were first weighed, and thereafter tested on the scales weekly, and a record kept of their weight at each weighing. Some of the records show remarkable gains, while others show steady upward progress. The temperature in the tent has registered as low as 16 degrees while studies were in progress and no one seemed to suffer, protection to the feet being assured by heated soapstone in the sitting bag. * * *

Most of the pupils who came to us were below grade in their studies. Under our ideal conditions (small numbers, perfectly fresh air, nourishing food, rest, and exercise) they made much progress. One second-grade child who was with us less than two months, upon her return to school was put into the fourth grade. We had nine grades in our school. One teacher taught the first five grades; the other took the four remaining grades. When possible the classes were united. The backward pupils were greatly helped by reciting with several classes. Children who were poor in a certain branch were put into two or three classes of that branch. A child who was particularly good in a study was allowed to recite that branch with a higher class. In every way the children were encouraged and not held back.

Program: Breakfast, 8.45–9.15; recitations, 9.15–11.30; gymnastics and play, 11.30–11.45; washing of hands and dinner, 11.45–12.30; cleaning of teeth and sleep, 12.30–1.45; recitations, 1.45–3.45; supper, 3.45–4.

THE EXCEPTIONALLY CAPABLE CHILD.

Not so much is done for the exceptionally capable child as for the retarded. It is generally taken for granted that the talented child can take care of himself, but from an economic point of view there is more loss in the arrested progress of a pupil of this class than there is in that of the dullard. If a bright boy is capable of doing the work of the eight grades in seven years he should be permitted to do it in that time. In 1911, 54 cities reported some provision for the exceptionally capable child. He is receiving recognition through either the organization of special classes or the adoption of more flexible systems of promotion. Baltimore, Cincinnati, Indianapolis, Worcester, and Salt Lake City now provide special classes for those above the normal in mental ability.

SPEECH DEFECTS.

Special classes for stammerers and others having speech defects are conducted in New York, Chicago, Minneapolis, and Seattle. Upon investigation in 1910 Supt. Ella Flagg Young, of Chicago, found that there were 1,744 children in the schools of that city who had speech defects of one kind or another. Accordingly 10 special teachers were employed to devote their efforts to the correction of these defects. The children affected, however, were not gathered into one building or into classes, but a plan was adopted of assigning to each teacher a circuit and having her travel from school to school during the day. In the other cities named special classes were formed.

PRESENT STATUS.

As showing the present status of the movement for the provision of special schools and classes for exceptional children, the following table is reproduced from Bulletin, 1911, No. 14, of the Bureau of Education.

Statistical summary of cities making provision for exceptional children.

States.	Number of cities reporting.	Delinquent.	Backward.	Defective.	Blind or semi-blind.	Deaf or semi-deaf.	Open-air.	For foreigners.		Vocational.	Continuation.
								Day schools.	Night schools.		
United States	898	121	207	94	14	46	25	73	197	136	36
North Atlantic Division	370	56	90	43	4	6	12	41	122	48	12
South Atlantic Division	60	5	14	2			1	1	4	10	2
South Central Division	90	10	18	7			1	4	8	13	6
North Central Division	322	38	66	30	9	34	9	16	53	55	14
Western Division	56	12	19	12	1	6	2	11	10	10	2
North Atlantic Division:											
Main	17		3	1	1	1			5	1	
New Hampshire	12	1	2				1	2	5	2	
Vermont	8	2	2	1					2	2	1
Massachusetts	103	8	28	13		2	2	11	39	22	3
Rhode Island	16	4	4	2	1	1	1	3	4	2	1
Connecticut	21	3	5	4			3	5	15	1	
New York	78	13	19	7	1	1	2	12	28	10	4
New Jersey	35	12	15	11	1	1	3	1	15	4	2
Pennsylvania	80	13	12	4				6	16	4	1
South Atlantic Division:											
Delaware											
Maryland	5	2	3	1				1	1	2	
District of Columbia	1		1				1		1		
Virginia	11	2	5	1					1	3	
West Virginia	5									1	1
North Carolina	13	1	4							2	
South Carolina	7		1								
Georgia	15								1	2	1
Florida	3										
South Central Division:											
Kentucky	10	1	1	1				1	2	2	1
Tennessee	7	3	4	1				1			
Alabama	10		1						1	1	
Mississippi	10		2	1						2	
Louisiana	6		2				1		1	1	1
Texas	31	3	5	3				2	3	6	3
Arkansas	8										1
Oklahoma	8	3	3	1					1	1	
North Central Division:											
Ohio	31	5	5	4	2	3	3	2	7	5	4
Indiana	45	5	10	5		2	1	1	7	6	3
Illinois	55	3	7	2	2	3	2	5	10	7	1
Michigan	43	8	12	7		10		1	8	8	1
Wisconsin	34	3	7	4	4	14	2	1	10	8	
Minnesota	21	4	12	3	1	1	1	4	4	11	3
Iowa	28	1	1						2		
Missouri	27	6	9	3		1		1	3	2	
North Dakota	6	1	1	1						1	
South Dakota	2									1	
Nebraska	7							1	1	1	
Kansas	23	2	2	1					1	5	2
Western Division:											
Montana	6										
Wyoming	1										
Colorado	10	3	5	2				3	3		1
New Mexico	3	1	1	1				1			1
Arizona	3		1					2		1	
Utah	2		1	1							
Nevada	1										
Idaho	2		1						1	1	
Washington	6	1	1	2		1		1	2	1	
Oregon	6	1	2	1		1		1	1	2	
California	16	6	7	5	1	4	2	3	3	5	

Statistical summary of cities making provision for exceptional children—Continued.

States.	Parental or residential.	Epileptic.	For late-entering children.	For gifted children.	Special-help teacher.	Stammerers, stutterers, lispers.	Crippled.	Incorrigible, refractory.	Dumb.	Home subnormal.
United States	24	5	75	54	13	2	3	7	1	1
North Atlantic Division	10	1	26	22	7	1	1	3	.....	.....
South Atlantic Division	1	1	6	2	1	.....	.....	2	.....	1
South Central Division	1	.....	7	3	.....	.....	.....	.....	.....	.....
North Central Division	5	2	27	19	4	1	2	1	.....	.....
Western Division	7	1	9	8	1	.....	.....	1	1	.....
North Atlantic Division:										
Maine	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
New Hampshire	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Vermont	.....	.....	1	1	.....	.....	.....	.....	.....	.....
Massachusetts	1	.....	4	8	.....	.....	.....	1	.....	.....
Rhode Island	1	.....	2	.....	2	.....	.....	.....	.....	.....
Connecticut	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
New York	6	.....	8	8	3	1	1	2	.....	.....
New Jersey	1	.....	4	2	1	.....	.....	.....	.....	.....
Pennsylvania	1	1	4	2	1	.....	.....	.....	.....	.....
South Atlantic Division:										
Delaware	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maryland	1	1	1	1	1	.....	.....	1	.....	.....
District of Columbia	.....	.....	.....	.....	.....	.....	.....	1	.....	.....
Virginia	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
West Virginia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Carolina	.....	.....	3	1	.....	.....	.....	.....	.....	.....
South Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Georgia	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Florida	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Central Division:										
Kentucky	.....	.....	2	.....	.....	.....	.....	.....	.....	.....
Tennessee	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alabama	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mississippi	.....	.....	2	2	.....	.....	.....	.....	.....	.....
Louisiana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Texas	.....	.....	2	1	.....	.....	.....	.....	.....	.....
Arkansas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oklahoma	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
North Central Division:										
Ohio	1	1	2	3	2	.....	1	.....	.....	.....
Indiana	.....	.....	5	6	1	.....	.....	.....	.....	.....
Illinois	1	.....	6	.....	.....	.....	1	1	.....	.....
Michigan	.....	.....	3	2	.....	.....	.....	.....	.....	.....
Wisconsin	.....	.....	2	2	.....	.....	.....	.....	.....	.....
Minnesota	2	1	4	2	.....	1	.....	.....	.....	.....
Iowa	.....	.....	1	1	.....	.....	.....	.....	.....	.....
Missouri	1	.....	3	2	1	.....	.....	.....	.....	.....
North Dakota	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
South Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nebraska	.....	.....	.....	1	.....	.....	.....	.....	.....	.....
Kansas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Western Division:										
Montana	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming	.....	.....	1	1	.....	.....	.....	.....	.....	.....
Colorado	1	1	3	3	1	.....	.....	.....	.....	.....
New Mexico	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arizona	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
Utah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	.....	.....	1	1	.....	.....	.....	.....	.....	.....
Washington	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon	1	.....	.....	1	.....	.....	.....	.....	.....	.....
California	2	.....	3	2	.....	.....	.....	1	1	.....

VIII. INDUSTRIAL EDUCATION.

By industrial education is meant here the new direction which has been given during the past decade to hand training. This new direction comprehends the training in school of youth for specific vocations in the industries. It differs from ordinary manual training in that it is vocational and specific, while manual training is cultural and general in aim. In its broader application it is sometimes used to include every form of training for the industries, but in recent years the tendency has been to narrow the meaning to make it practically synonymous with trade training.

While it is not claimed that industrial education is distinctly a city school movement, it is true that the major part of what has been accomplished in this country in training for the industries has been in the cities. It is in the cities that industrial needs are greatest. From a list of 142 industrial schools prepared in the Bureau of Education in 1910, 121, or 85 per cent, were found to be in cities of 25,000 population and over. This list, however, did not include industrial schools for Indians and for the colored race, many of which are located in rural communities. But of the technical high schools which offer instruction more or less industrial in aim, practically all are in the larger cities.

Two agencies that have given decided impetus and direction to the new movement are the Massachusetts Commission on Industrial Education and the National Society for the Promotion of Industrial Education.

Though the new movement had an earlier origin it did not begin to take definite form in this country until about 1905. It was in Massachusetts that the first definite step was taken. Under authority of a resolve of the legislature of that State, approved May 24, 1905, the governor appointed a "commission on industrial education" to investigate the subject in the State of Massachusetts and "as to similar educational work done by other States, by the United States Government, and by foreign Governments." After several months of study, the commission made its report with recommendations, one of which was that a second commission be appointed to extend the investigation of industrial training and of local needs and to advise and aid in the introduction of independent industrial schools. This recommendation was embodied in the law of 1906 which created such a commission and defined its powers and duties. Under the provisions of this law, cities and towns were empowered to establish independent industrial schools and to receive State aid upon approval of the commission. Prior to October 1, 1911, 15 schools had been approved by the commission and by the State board of education to which its functions were transferred. On that date

8 additional schools were in process of organization in anticipation of similar approval.

The appointment of the Massachusetts commission and the publication of its reports gave great momentum to the movement for industrial education, but they have not stood alone in the exertion of such influence. The organization of the National Society for the Promotion of Industrial Education in New York City in November, 1906, marked the beginning of a potent factor in both the development and the direction of industrial training. Its objects as stated by its founders are:

> To bring to public attention the importance of industrial education as a factor in the industrial development of the United States; to provide opportunities for the study and discussion of the various phases of the problems; to make available the results of experience in the field of industrial education both in this country and abroad, and to promote the establishment of institutions for industrial training.

The society holds annual meetings at which all phases of the subject are discussed, and publishes a bulletin containing information designed to promote the objects of the organization.

In addition to this society a number of other organizations [1] of national scope have interested themselves in industrial education. Two of the most important of these are the National Association of Manufacturers and the American Federation of Labor. By the adoption of the report of its committee on industrial education made in May, 1910, the Association of Manufacturers committed itself to the policy of taking "boys of 14 years of age and giving them four years of training corresponding to the high-school period—half skilled work and half suitable schooling."

At the thirteenth annual convention of the Federation of Labor held in St. Louis in November, 1910, the report of the special committee appointed to review the report of the committee on industrial education recommended "that the special committee appointed by authority of the Denver [1908] convention be continued, and that that committee be urged and authorized to prosecute their investigation, and to lend every assistance to the accomplishment of the extension and completion of comprehensive industrial education in every field of activity." The convention concurred in the report by unanimous vote.

CLASSIFICATION OF INDUSTRIAL TRAINING.

As regards character and amount of instruction given, there may be said to be in the United States three types of industrial training: (1) Complete trade training, in which the effort is to develop skilled workers capable of doing journeyman's work; (2) intermediate, or preapprentice, trade training, through which it is sought to shorten

[1] For a list of such organizations see Annual Report of the Commissioner of Education, 1910, p. 224.

the period of apprenticeship or to give some industrial skill and intelligence preparatory to apprenticeship; (3) supplementary instruction for those already engaged in industrial pursuits.

Classified according to the source of support, there are four kinds of industrial schools: (1) Those depending on tuition fees and usually operated for profit, (2) those supported by endowment, (3) those operated by business corporations for the instruction of their employees, and (4) those supported by public funds. A careful examination of the courses offered reveals the fact that in the main those schools which offer complete trade training are supported either by tuition or by endowment, and that with few exceptions public industrial schools as yet offer only supplementary and preapprentice instruction.

Another classification may be made of industrial schools, the line of demarcation being drawn between schools which devote the whole time to instruction and those in which part time is devoted to instruction and the remainder to work in a shop or factory and under shop or factory conditions. Those in which all the time is spent in school are the more numerous. Schools in which part of the time is spent at work under factory conditions constitute a new development in industrial training in this country. Fitchburg, Mass., was the first city in the country to establish such a school as a part of the public-school system. In 1908 a modification of the "cooperative plan," introduced two years previously in the engineering department of the University of Cincinnati, was introduced in the Fitchburg High School. Boys were employed alternate weeks in various industries of the city and were paid stipulated wages. The other half of the time was devoted to study in school. The school is now in the fourth year of its history and the plan has been pronounced a success.

Fitchburg's lead has been followed by several cities, though usually the term "Continuation school" is applied, in analogy to the German term Fortbildungsschule. Continuation schools are now conducted in Boston, New York, Providence, Chicago, and Cincinnati, and beginnings have been made in some other cities.

LEGISLATION RELATING TO INDUSTRIAL EDUCATION.

The National Society for the Promotion of Industrial Education reports[1] that, of the 46 States, 29 have enacted laws relating to industrial training. These States are Alabama, Arkansas, Connecticut, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Nevada, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, Vermont, Virginia, Wisconsin, and

[1] National Society for the Promotion of Industrial Education, Bulletin No. 12. Legislation upon industrial education in the United States, New York, 1910.

Wyoming. The diverse terminology in the enactments of the several States, however, renders a close classification well-nigh impossible and necessitated the inclusion in the list of some laws which do not relate strictly to industrial education.

Laws were enacted by State legislatures meeting in 1911 as follows:

Alabama.—Appropriating $50,000 for the establishment of an industrial school at Ragland, and $5,000 for its maintenance.

Colorado.—(1) Providing for the establishment of a school of agriculture and mechanic arts at the Fort Lewis School and appropriating $75,000 therefor. (2) Establishing the Colorado State Trade School at Aspen.

Indiana.—Authorizing any city having a population of over 200,000 to establish and maintain a trade school.

Maine.—Providing for the introduction of industrial courses in free high schools and academies and in State normal schools for the training of teachers, and empowering cities and towns to establish "general industrial schools."

Massachusetts.—(1) Making appropriations for independent industrial schools. (2) Further providing for the administration of vocational schools receiving State aid.

Michigan.—Authorizing any school district to establish vocational schools.

Minnesota.—Providing for the teaching of certain industrial subjects in high and graded schools.

Pennsylvania.—Appropriating $10,000 for the maintenance for two years of the Avery College Trade School at Southside, Pittsburgh.

Wisconsin.—Creating a State board of industrial education and providing for the establishment of vocational schools and of a school to train teachers of industrial subjects.

PRESENT STATUS OF INDUSTRIAL EDUCATION.

The present status of industrial education in the United States is shown to some degree in Chapter III of the Annual Report for 1910. In that chapter an attempt was made to list and classify industrial schools. The classification was necessarily tentative, but it serves to show to what extent the movement has spread. Not all the schools in the list were recently established, but many of them are of recent origin and new direction has been given to many of those already in existence. The list does not include a few schools known to exist but from which no reports could be obtained.

In Group A of that list the more complete classification was attempted. Schools were classified as giving (1) complete trade training, (2) preapprentice instruction, or (3) supplementary instruction to those already engaged in industrial pursuits. In all, 142 schools were included in this group.

Group B included schools for the colored race. Most of these schools are primarily academic in aim and the industrial instruction given is usually supplementary to academic work. For this reason these schools were grouped separately, as giving industrial training that is difficult to classify. This group contained 53 institutions, but it is known that a number of others give industrial training in some form.

Group C was made up largely of nonreservation boarding schools for Indians. Of these schools 14 were reported by the Office of Indian Affairs to be giving systematic trade training in some trades, and 8 some form of less specific trade training.

To the list a fourth group was added which included technical high schools. Generally this type of school is not giving trade training, but they are offering much instruction supplementary to the trades and much that prepares for technical or semitechnical pursuits in the industries. This group was likewise difficult to classify, but reports were received from 28 schools which were thought to belong in the list.

VOCATIONAL GUIDANCE.

For some time there have been those who have thought that the public school should give more attention to directing the choice of its pupils' future vocations. The higher institutions of learning not only prepare for vocations but follow their graduates into life with advice and assistance. In contrast with this the public school has too often sent out its pupils without even so much as a heartily expressed good wish. There is, however, a growing disposition on the part of public-school men to make the school more helpful in this respect. In New York, Boston, Providence, Buffalo, Cleveland, Chicago, St. Louis, and some other cities steps have been taken to that end. A national conference on vocational guidance was held in Boston on November 15 and 16, 1910. From a small beginning vocational guidance has spread in New York City until every day and evening high school has one or more teachers who are charged with the duty of helping students choose vocations and secure employment.

In May, 1909, the school committee of Boston requested the cooperation of the vocation bureau and provided for the appointment of a "committee on vocational direction" to be composed of six members of the teaching staff. The committee was appointed by the superintendent in the following month and immediately entered upon the performance of its duties. Of the work of this committee Supt. Stratton D. Brooks, in his annual report for 1910, said:

> The committee on vocational direction has arranged for cooperation among various organizations interested in the work of vocational direction, conducted meetings of principals and teachers, and taken such other action as they deemed necessary.

Most important of the results accomplished by the committee on vocational advice is the appointment in each high school and elementary school of one or more vocational counselors. These counselors have been selected by the principals with reference to their interest in the work of vocational direction, their skill in determining the abilities and possibilities of the children, and their willingness to devote extra time to acquiring information and perfecting themselves for the successful performance of their important duties. Meetings of these counselors have been held for the purpose of discussing the problems of vocational direction and considering how best to minimize its dangers and increase its beneficial results. Arrangements have been made whereby the vocation bureau will conduct a course of instruction for vocational counselors wherein they may be even more efficiently prepared for the work of directing pupils wisely.

IX. THE WIDER USE OF THE SCHOOL PLANT.

The average American school building is open not more than 6 hours a day for 5 days a week and 36 weeks in a year—about 1,080 hours. If Sundays be excluded, there are in all approximately 3,000 hours in a year during which buildings might be used. This indicates a time waste of about 1,920 hours, or 64 per cent. With the possible exception of the church, no American institution uses its plant so little. Certainly public buildings in general are used more than schoolhouses, notwithstanding the fact that more money is invested in the latter. But this is not the only consideration. There is a wide and growing social need which the school building may serve. Many places of amusement frequented by young people in large cities are unwholesome in their influence and the schoolhouse should provide the needed healthier social and moral environment.

In recent years the movement for the wider use of the school plant has taken form particularly in vacation schools, public evening lectures, and social and recreation centers.

VACATION SCHOOLS.

Although the first vacation school organized as a part of a city school system was opened as early as 1885, in Newark, N. J., it was not until the late nineties that the movement became general and not until the first decade of this century that school boards generally began to take control of such schools. At first they were conducted wholly or in part by philanthropic organizations.

There are two types of the vacation school; or, otherwise expressed, there are two lines of work which vacation schools pursue. In the first type the aim is social, being merely to offer the children an opportunity to get out of the hot and crowded streets and into more wholesome surroundings in which they may play, sing, and do elementary handwork and the like under competent direction. Usually some instruction is offered in nature study, first aid to the injured, and similar subjects. Vacation schools of this sort are the more

numerous and better known. The second type is academic in aim. In several cities special classes are organized in vacation time for the purpose of enabling pupils failing in some of their studies of the previous year to make up work, and thus escape repeating a whole year's work. In some cases especially capable pupils are permitted to study in vacation time in order to advance a grade or to save part of a year.

Two notable examples of the latter type of vacation school are those found in the work undertaken in Cleveland and St. Louis this year. Since the plans in these two cities contemplate the most thoroughly organized system of academic work in vacation time in the country at present, they are presented at length. Supt. W. H. Elson's recommendations as adopted by the Cleveland Board of Education at its meeting on May 22, 1911, follow:[1]

First. That the summer school shall begin Monday, June 5, and continue 12 weeks. The attendance in this school shall not be compulsory, but be entirely at the option of the parents, and that in cases of doubtful physical ability attendance shall be on the approval of the medical inspector. This does not release the child from attendance at the regular school terms beginning in September and ending in May.

Second. That in elementary schools it should offer an opportunity for retarded children in the grades from the fourth to the eighth, inclusive, who are retarded one year, and below the fourth grade children who are retarded two years or more.

Third. That the hours be from 8 a. m. to 2 p. m., with recess in the morning and one hour for noon, and salaries of teachers should conform to those of the regular school year.

Fourth. All elementary school buildings should be open for summer classes except where the director of schools finds it impossible on account of repairs or changes to use the building, in which case the children should be transferred to another school.

Fifth. One teacher in each building should be assigned as assistant principal, who shall make reports and direct in matters of detail.

Sixth. The make-up of classes should conform to the regulations governing the same in the regular school year, and in cases where there are not sufficient pupils to constitute a school children should be transferred to the nearest building having their grade and division.

Seventh. Obviously, in view of the bearing of the summer school upon the regular school, principals will desire to organize the classes in their respective buildings. In view of the early closing this year this will be possible and will require their attendance on the first day of the summer school.

Eighth. That an academic high school for regular work be opened in the Central High building, to which pupils from any high-school district in the city may be admitted, the hours and salaries of teachers to conform to those of the regular school year, one teacher being assigned as assistant principal, who shall direct the details of the school and make reports.

Ninth. That regular work be conducted in the Technical High School and the High School of Commerce, as heretofore.

The following recommendations, submitted by Supt. Ben Blewett, of St. Louis, were adopted by the board of education of that city on June 13, 1911:[2]

[1] Official proceedings Cleveland Board of Education, May 22, 1911.
[2] Official proceedings St. Louis Board of Education, June 13, 1911.

1. That the board establish a vacation review school for pupils wishing to make up deficiencies in not more than two studies and not extending over more than two quarters' work, and for pupils capable of doing work for an advanced class.

2. That pupils be admitted to this school from the fifth, sixth, seventh, and eighth grades and from any high-school term.

3. That admission be possible only on the certificate of the principal of the school from which the pupil comes that the pupil can undertake the review in subjects named with a reasonable expectation of success.

4. That the superintendent of instruction be authorized to admit to the school pupils whom the principals shall certify as capable of undertaking advanced work, provided these can be accommodated after those entered to do review work.

5. That the principal of the vacation review school shall, at the close of the term, certify to the work that has been tested and satisfactorily completed by each pupil and that this certificate shall be given full credit in placing the pupil on his return to his school at the beginning of the regular term.

6. That the term of this school be for seven weeks and that the sessions be on six days of the week, during the morning, hours to be fixed by the superintendent of instruction.

7. That the following be approved as the schedule of per diem salaries: Principal, $6; teacher of high-school subjects, $4; teacher of grade subjects, $3.

8. That the school be held in the Central High School building.

Supt. Blewett reported to the St. Louis Board of Education on September 12, 1911, as follows: [1]

Attendance.—The board at the June meeting authorized the organization of classes for the benefit of pupils whose principals certified that they could undertake specified review or advanced work during a summer term with reasonable expectation of success in it. The number of pupils applying for admission to these classes greatly exceeded the first expectations. There were registered in grade studies 1,958 pupils; in high-school studies, 740 pupils. There were in attendance in the grades and high school, respectively, 1,592 and 676 pupils.

The expense for salaries was $9,828, and for textbooks and stationery $799.05, a total of $10,627.05. This does not include any expense for textbooks borrowed from the stock of the several schools. The actual cost per pupil was approximately $4.75.

Organization.—The number of pupils made it advisable to place the high-school work and the grade work in separate buildings. They were located, respectively, in the Soldan and Central High School buildings.

Results.—The character of the attendance, the spirit of the pupils, and the success in the work undertaken by them seem to have met the highest expectations of the board and its officers. No recent extension of the work provided for so large a need, and it seems probable that there will be a demand for additional schools for the convenience of pupils in the grades wishing to do this work in the summer. * * *

At the beginning of the last week of the term the membership was 1,595 (719 boys and 876 girls). Of this number, 606 boys and 778 girls (1,384 total) received certificates. One thousand one hundred and ninety-one were satisfactory in two subjects, 149 passed in one subject and failed in one, and 44 who were taking only one subject received certificates for credit. Thirty-five did not appear for examination and 176 failed on examination to get any credit.

Three hundred and twenty-one brought certificates requesting two quarters' work in two subjects. At the middle of the term 47 of these were requested to abandon the attempt to do two quarters' work. Of the 274 who continued, 216 completed two quarters' work in two subjects.

[1] Official proceedings St. Louis Board of Education, Sept. 12, 1911.

Pupils' success in secondary studies.

	Advance.	Advance and review.	Review.	Total.
Registered for 2 subjects	129	125	162	416
Passed in 2 subjects	75	53	72	200
Passed in 1 and failed or dropped 1 subject	36	53	60	149
Failed in 2 subjects	10	7	14	31
Dropped from course	8	12	16	36
Registered in 1 subject	143	.....	181	324
Passed	96	.....	130	226
Failed	25	.....	26	51
Dropped from course	22	.....	25	47
Total registration	272	125	343	740

PUBLIC EVENING LECTURES.

One of the most noteworthy examples of the extension of the use of the school building is its use for public evening lectures. Such lectures are now to be found in a large number of cities.

As might be expected the lecture movement has attained different degrees of perfection in different cities. From the elaborate system in New York, where the department of education provides lectures in 166 centers and under the supervision of a specialist, the scale descends to the smaller city in which the use of one or two buildings is allowed and lecturers are paid by means of a small admission fee or by contribution from a school improvement association or some source other than the school board.

The most extensive system of free public lectures in the United States is that in the City of New York. The following summary shows the number and character of lectures given in 1909–10:

Number and character of lectures, 1909-10.[1]

	Courses.	Subjects.
FIRST GROUP.		
I. Literature	12	98
II. History	24	156
III. Social subjects	14	97
IV. Fine arts	17	87
SECOND GROUP.		
I. Astronomy	3	15
II. Physics	10	90
III. Chemistry	4	35
IV. Geology	1	5
V. Biology	5	25
VI. Physiology and hygiene	2	13
VII. Industries	2	12
THIRD GROUP.		
I. South America	1	4
II. Europe	6	27
III. Asia	3	19
Total	104	683

[1] Annual report of the supervisor of lectures to the board of education for the year 1909–10, pp. 20–22.

In addition to these courses of lectures, single lectures were given in 971 subjects. In 1910, lectures were given to an aggregate attendance of 959,982 people.

Cleveland is an example of the city that makes its lectures popular in nature. After a period of entertainment, including music, recitations, and the like, a lecture is delivered on some subject of general interest. Civics, travel, hygiene, social questions, and similar subjects are discussed in popular style. Lecturers are drawn from almost all walks of life. A physician discusses some phase of preventive medical practice, a college professor points out some social fault and suggests means of correction, a minister makes an appeal for the boys of the city, a business man outlines the qualifications necessary to efficiency in commercial life, and so on. But partisan politics and sectarianism are barred. The lectures given in Cleveland have met with hearty public approval and have been of great benefit to the people.

Milwaukee introduced public evening lectures in 1902, and since that time has developed a comprehensive system of courses, which are proving a strong force for social betterment and for broadening the culture of the people. Many of the lectures are illustrated and cover such subjects as history, natural science, art, literature, travel, sociology, economics, and industrial and municipal problems. In 1909 such lectures were given in 25 buildings. Mr. W. L. Pieplow, president of the board of school directors, reports the lectures growing in popularity.

Birmingham, Ala., is one of the cities in which there is a lecture system not supported from school funds and not yet free to all the people. In that city, through the initiative of Supt. J. H. Phillips, a "lyceum course" has been organized. The use of the high-school auditorium is given free and the board of education furnishes heat, light, and janitor service. A nominal fee is charged for the payment of lecturers, but the lectures are largely patronized nevertheless. Lectures on literature, art, travel, history, and the like, and entertainments of various sorts find place on the programs.

Other important cities which have lecture systems are Los Angeles, San Francisco, Chicago, Indianapolis, Louisville, New Orleans, Worcester, Minneapolis, St. Paul, St. Louis, Jersey City, Newark, Rochester, Cincinnati, Columbus, Philadelphia, Pittsburgh, Memphis, and Richmond.

SOCIAL AND RECREATION CENTERS.

The latest development in the extension of the use of the school plant is its use as a social and recreation center. Though New York City opened an evening recreation center as early as 1899, it was devoted chiefly to athletics, and so continued until the move-

ment assumed a wider range several years later. It was in Rochester, N. Y., however, that social and recreation centers were first extensively organized; and it is to that city that many of those interested in such enterprises look for guidance.

Libraries and reading rooms, social and civic clubs, literary societies, organizations for the study of music and art, concerts and dramatics, gymnasiums, and recreation rooms, all come within the scope of this type of school extension. The Yearbook of the Playground Association of America reports that 31 cities maintained recreation centers during the winter of 1910–11. The following statements show more in detail the nature of the activities fostered in some of the more important cities:[1]

Rochester.—In the winter of 1906–7 a campaign was begun for the use of the school building for social and civic clubs, and as a result the "school extension committee," representing 11 citizens' organizations, was formed. On petition the board of estimate and the common council provided the necessary funds and three centers were opened. The board of education as custodian of school properties assumed the administration. Supervision was provided for all activities, especially those for boys and girls, Mr. Edward J. Ward being the chief supervisor in charge. During the year 1909–10, 16 buildings were opened, though only the original 3 centers were equipped for general social-center work. In this city almost every kind of wholesome amusement, recreation, and entertainment is offered. There are civic clubs for both men and women, debating societies, literary clubs, social organizations, musical entertainments, art clubs, athletic leagues, reading rooms, quiet game rooms, and gymnasiums. In concluding his report in 1910, Mr. Ward said: "The aim of the school extension movement during the past three years has been to so widen the use of the school plant that this institution may serve in the complex life of the city as the little simple schoolhouse served in the primitive life of the rural community, not only as an educational center for the children, but also as the common local point of the neighborhood life."

New York.—In his annual report for the year ending July 31, 1910, Supt. William H. Maxwell says: "Evening recreation centers were maintained from October until June in 36 school buildings. The aggregate attendance was 2,165,457, an increase of 18,196 over the preceding year. The average evening attendance was 12,985, an increase of 1,517 over the preceding year. The chief activities were quiet games, reading (books being furnished by the public libraries), gymnastics, athletic sports, folk dancing, literary and social clubs, and study rooms for children who have no convenient place to study their lessons at home." In 1910–11, 38 centers have been conducted. Of this number 27 are open every night in the week except Sunday nights; others are opened on specified evenings. Sessions usually last from 7.30 to 10 p. m. There are 26 centers for men and boys and 12 for women and girls. Athletic, civic, literary, philanthropic, and social clubs are maintained. In 1910 District Supt. Edward W. Stitt, to whom was assigned the supervision of vacation schools, playgrounds, and recreation centers, reported 774 such clubs in existence. The public library supplies books to each center for its reading room and changes are frequently made. In this way the social and recreation center becomes a circulating library base. Free gymnasium privileges are offered, and such games as basket ball, handball, and indoor baseball are played by the boys. The girls dance folk and æsthetic dances. Regular dancing classes are organized in centers for girls, and once a week approved members of a neighboring center for young men are admitted.

[1] Bureau of Education. City school circular, No. 2, 1911.

A game room is provided, usually near the entrance, where such quiet games as checkers and dominos can be played. Athletic contests among the various play and recreation centers are encouraged.

Philadelphia.—The first social center was opened January 22, 1907, in the Agnew School, through the initiative of the principal. The board of education granted the use of the building for two nights in a week and furnished heat, light, and janitor service. Financial aid was given by the Public Education Association and by the Civic Club. The teachers at first were volunteers, but later some paid workers were employed. During the year 1909–10 there were eight centers in operation, seven others having been organized on similar lines to those of the Agnew School. Primarily the object of these centers is to draw young people into wholesome surroundings in the evenings. The work is not identical in all buildings, but the following will indicate in general the character of the activities: Classes in manual training, sewing, music, and gymnastics; folk dancing; social and musical entertainments; lectures on civics, hygiene, travel, etc.; civic clubs; reading rooms, and rooms for quiet games. Statistics for 1909–10: Buildings in use, 8; classes organized, 53; sessions, 164; average attendance, adults, 258; minors 15 to 21 years old, 489; minors under 15 years old, 788.

Chicago.—Library facilities, gymnastics, games, sewing, lectures, music, and social dancing are offered to those who attend. The aim is to provide, as far as possible, healthy social and moral environment for the young. Private philanthropy and the cooperation of benevolent organizations contribute to the support of the work. In 1910 the board of education appropriated $10,000 for social centers. In her annual report for 1910, Supt. Ella Flagg Young says: "The distinctive gain was not so much in what was learned as in the social and moral conditions that were made attractive, and that tended to draw the young people from the more dangerous class of amusements which they were likely to frequent."

Cleveland.—The social center is in charge of a special committee of the board of education. Children below the seventh grade are not admitted unless accompanied by their parents. The activities include lectures on civics, travel, hygiene, and other subjects suitable to the community. Music and a "social hour" usually follow the lecture. In its announcement for the season of 1910–11, the committee on lectures and social-center development says: "The program has this year, as in the past, the elements of recreation and entertainment. Every lecture is supplemented by music and fine pictures, while every concert is designed to delight the popular audience."

X. PLAYGROUNDS.

In only five cities were public playgrounds with supervised play maintained prior to the year 1900, namely, Boston, Philadelphia, Pittsburgh, New York City, and St. Paul.[1] Boston appears to have been the first city to provide supervised play, it having been established in that city as early as 1887, but it was in Philadelphia in 1895 that the administration of public playgrounds was first undertaken by the school authorities of a large city. From these beginnings the movement has grown until, in 1910, 184 cities maintained playgrounds.

The Playground Association of America, organized in Washington, D. C., April 13, 1906, has given great impetus to the establishment of public play centers. Since its organization 98 cities have established public playgrounds—more than one-half the total number reporting such activities in 1910.

[1] The Playground, 5: 24–33, April, 1911.

Playgrounds are of two types, (1) those on land contiguous to school buildings and (2) those located in small parks or lots apart from school buildings and having no connection with them. The playground propaganda contemplates the development of both types. Many schoolhouses in the cities are constructed on lots only large enough for the buildings alone, and have little or no space around them for play; but the present tendency is toward larger grounds. Some authorities urge at least as much as 30 square feet of space for each child.

The playground not contiguous to a school building is usually located on land acquired for that purpose or in a park. In the better organized systems, competent persons for instruction and supervision are employed.

The nature of the play varies, as might be expected. In New York City the boys play basket ball, indoor baseball, handball, dodge ball, and the like; while the girls play milder games and exercise in various forms of systematic drills and folk dances; swings, seesaws, and similar apparatus are installed; kindergartens are organized in connection with the playgrounds, and departments for mothers and their babies are provided; story-telling has recently been introduced.

In Cincinnati, the supervisor conducted in 1909–10 a class for the training of teachers for playground work; the grounds are open in the afternoons in the spring and fall from 3 to 5.30 p. m., and during vacation from 8.30 a. m. to 7.30 p. m. on six days in the week; not all the time is devoted to play; for the boys are given instruction in manual work in wood, etc., and the girls in sewing, crocheting, boxwork, clay modeling, and raphia.

In Detroit, both boys and girls are divided into three classes, class A including all over 85 pounds in weight, class B including all between 70 and 85 pounds, and class C all under 70 pounds; systematic exercise is given each class; contests are held from time to time between two different centers; in addition to the play, work in sewing, basketry, and the like is given.

In Washington, Congress appropriates funds for grading grounds and buying equipment, and supervision is provided by private subscription; centers are equipped with swings, seesaws, sand boxes, and the like; various kinds of organized games are played; some instruction in handwork is given; a new feature is the coordination of the playground with the school garden.

As showing the recent development and present status of playground work, the following is quoted from the Yearbook of the Playground Association of America:

> Reports have been received from only 184 of the cities maintaining playgrounds. These 184 cities during the year ending November 1, 1910, maintained 1,244 playgrounds, employed 3,345 men and women exclusive of caretakers, and expended

$3,025,779.23. The reports failed to indicate whether 1,044 of the persons employed were men or women. Where the sex of the worker was given, 810 were men and 1,491 women. Thirty-two cities employed 643 workers throughout the year.

In 17 cities playgrounds were maintained by playground commissions, in 15 cities by school boards, in 28 cities by park boards, in 27 cities by playground associations, in 5 cities by private individuals, in 88 cities by other agencies or by several agencies combined.

In 62 cities the playgrounds were supported by municipal funds, in 51 cities by private funds, in 59 cities by both municipal and private funds, in 1 city by municipal and county funds. In 11 cities the sources of support were not given.

In 68 cities 219 playgrounds were open throughout the year. There were 874 playgrounds open only during July and August. In 3 cities some of the playgrounds were open nine months. In 5 cities some of the playgrounds were open April 1 to December 1, in 5 from April 1 to November 1, in 4 from May 1 to November 1, in 6 from May 1 to October 1, in 2 from June 1 to December 1, and in 4 from June 1 to November 1. There were 214 playgrounds in 60 cities open in evenings.

Thirty-one cities reported that their schoolhouses were used as recreation centers; 27 of these cities reported 201 such centers.

The number of cities reporting special playground activities were as follows: Dramatics, 26; folk-dancing, 94; gardening, 43; industrial work, 76; libraries, 52; self-government, 40; singing, 72; story telling, 114; swimming, 69; wading, 51.

According to the reports received, supervised playgrounds were first established in 128 cities as follows: In 1 city in 1887, 1 in 1895, 1 in 1896, 1 in 1898, 1 in 1899, 7 in 1900, 5 in 1901, 2 in 1902, 2 in 1903, 5 in 1904, 4 in 1905, 9 in 1906, 6 in 1907, 13 in 1908, 35 in 1909, and 35 in 1910.

CHAPTER V.

LIBRARY EXTENSION IN THE UNITED STATES.

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INTRODUCTION.

The modern conception of the duties of the public library extends them to the entire community, requiring the library to find a reader for every book on its shelves and provide a book for every reader, and in all cases to bring book and reader together. Not merely the residents of cities and towns where libraries are located, but also the inhabitants of the rural districts, however remote, are entitled to this service. The public library is made an essential factor in the educational system, both because of its independent service to all classes of people throughout life, and also because of its cooperation with the public schools, which constantly becomes more intimate and useful. The functions of the library extend beyond the storing and provision of material for reading and study, and include, besides bibliography and reference, the use of its building as a place of deposit for collections in science, art, or history, and as a place of assembly for lectures, club meetings, exhibitions, and all interests outside the schools which promote education and culture. The present movement to broaden the scope of library activities is noticeable in nearly all civilized lands.

In this country the tax-supported public library, like the public school, is now the accepted type, because both are recognized as integral parts of our system of public education. Furthermore, following the example of the public-school systems, which have developed under State care and support, the aid and encouragement of the State is now accorded to public-library systems to enable them to fulfill their function of furnishing free books to all the people. Thirty-five States are now conducting library extension work, either through commissions or through other bodies serving similar purposes. Despite differences in organization and methods, the common aim of these State agencies is to encourage the establishment of libraries in all communities able to support them and to promote the efficiency of libraries already existing. In 29 States books are made more

widely accessible by means of traveling libraries, designed especially to reach the rural population, large portions of which are still unprovided with book facilities.

Many local libraries also, especially those in the larger cities, are performing for their communities valuable extension work, of which no adequate account can be given in this chapter. One important phase of this service is that rendered toward Americanizing and perparing for citizenship the foreign immigrants massed in large centers of population.

One of the most absorbing topics at the meeting of the American Library Association at Pasadena in May, 1911, was that of library extension, and the movement is believed to have received its greatest impetus at this conference. The League of Library Commissions, including 26 State bodies in its membership, is an affiliated organization of the American Library Association and meets with it. At their joint session in 1911 the various administrative units in library extension—State, county, township, city—were discussed, and it was seen that the county system, with State supervision, is gaining favor.

The movement toward coordination among libraries, one phase of which is the interlibrary loan system, is closely allied to library extension, and is making steady progress. The American Library Association through committees has given considerable attention to this problem. A bureau of information and a central lending library have been proposed, which, if funds were available for their establishment, might render distinct service to American scholars and to college and reference libraries. The collection and dissemination of information regarding the resources of American libraries is one branch of this movement.

A detailed account follows of current conditions and progress in those States which officially recognize the library extension movement, with the exception of New Hampshire, from which no recent reports on this subject are available.

ALABAMA.

The work of public and school library extension, and allied activities, such as are usually performed by library commissioners, is in Alabama carried on under the direction of a library-extension division of the State department of archives and history, at Montgomery, established in 1907.

Library legislation in Alabama may be grouped as (1) the statutory provisions for the organization and support of a State and supreme court library; (2) the maintenance of historical and legislative reference collections by the department of archives and history; (3) a very few special acts incorporating local library associations;

(4) provision for unlimited municipal support; (5) the legislation for the organization of the library-extension division, as follows:

It shall encourage and assist in the establishment of public and school libraries, and in the improvement and strengthening of those already in existence; it shall give advice and provide assistance to libraries and library workers in library administration, methods, and economy; and it shall conduct a system of traveling libraries.

From its very beginning, the efforts of the division have been directed to arousing and shaping public opinion throughout the State looking to the establishment of new public and school libraries, as well as to strengthening those already in existence. This has been done through correspondence, public addresses, and personal visits and advice on the part of the director of the department and the assistant in charge of the library-extension division. The press, the club women, and the heads of educational institutions have been valuable allies in the movement. Beginning in 1908, the division offers each year a five weeks' summer course in library training.

Stations for traveling libraries, the first of which went out in 1907, have been established, mainly in rural communities and schools. During 1910 the division acquired by gift about 100 books printed in type for the blind.

The Legislature of Alabama at its 1911 session passed a law, which has been approved, by which $100 is to be appropriated annually for each county for the purpose of establishing and maintaining libraries in the public schools, and $10 may be appropriated for each district public school in the county in any one year, provided its patrons and friends raise a like amount. The State superintendent of education shall compile and publish a select and annotated list of books from which the libraries shall be chosen, and is authorized to regulate other details.

A section of the appropriation bill for the ordinary expenses of the State government grants $5,000 annually for the further development and enlargement of the library-extension work, public reference work, and other needs of the department of archives and history.

CALIFORNIA.

The California State library carries on the work which in many States is under supervision of a public-library commission. It has a special department for extension work, but every department is active along extension lines. The counties, also, are cooperating in the work since the passage of the county library laws of 1909 and 1911.

In California, the great size of the State and the increase in rural population present problems which State traveling libraries and small municipal libraries have proved inadequate to meet. With

the conviction that the two cardinal defects in existing library organization in California should be remedied—namely, insufficiency of funds and incompleteness of service to all the people—the county has been adopted as a logical unit, because it is of a workable size and is better able to furnish adequate support; and with each county carrying on this work the entire State will be receiving definite and local library service. The county libraries give particular attention to supplying books for the use of public-school pupils, and in this regard the system is developing marked efficiency.

The main points of the law of 1911, now in force, are as follows:

1. The supervisors of any county may establish a county free library for that part of such county lying outside of incorporated cities and towns maintaining free public libraries, and for all such additional portions of such county as may elect to become a part of, or to participate in, such county free library system.

2. Any incorporated city or town maintaining a free public library may, by action of its city council, become a part of the county free library system.

3. Any incorporated city or town may contract with the county free library for such service as it may desire.

4. Counties may contract with each other for joint library service.

5. A board of library examiners is created, composed of the State librarian, the librarian of the San Francisco Public Library, and the librarian of the Los Angeles Public Library, to certificate applicants for the position of county librarian.

6. A tax levy not to exceed 10 cents on $100 may be made to support the county free library.

7. If a county does not wish to establish a library of its own, an alternative method is offered by means of a contract which may be entered into by the board of supervisors with any city library, the latter agreeing to extend its service to the county.

Previously the organization of county free libraries had been carried on under the contract plan of the 1909 law, and 12 counties had established the system, appropriating from $1,200 to $12,000 a year to carry on the work. Under the new law, the system is steadily being extended to additional counties.

The reference department of the State library furnishes information to any inquirer. It furnishes books to public libraries, or any other educational institution, on application; to individuals, through the signature of a State officer, of the librarian of the local library, or of the official head of any other educational institution, or on receipt of a $5 deposit; to a club or grange on request of its president, secretary, or librarian. The State library pays the cost of transportation to anyone borrowing through a county free library, but in every other instance the charges both ways are paid by the borrower.

There is also a legislative and municipal reference department, with a State-wide service to officials and individuals.

The extension department of the State library was established in 1903, and began work in that year by sending out traveling libraries to communities without library facilities. The department now has three separate divisions—traveling libraries, public libraries, and books for the blind.

Traveling libraries were made up of 50 volumes each, and were sent to any community without a public library on the application of five resident taxpayers. There was no charge for the use of these libraries, and the transportation both ways was paid by the State library. Since June 10, 1911, no traveling libraries have been sent out, as on that date the board of library trustees decided to withdraw them until further notice.

The public libraries division aims to keep in close touch with all the libraries of the State, and since 1905 library organizers have been kept in the field to encourage the establishment of libraries, to visit those already established, and to give advice and assistance in regard to library methods, buildings, etc.

According to 1911 statistics, there are in California 123 libraries supported by city taxation, of which 13 are free to residents of the whole county, and of these 12 are partly supported by the respective counties; 68 law libraries, of which 56 are county law libraries; 58 county teachers' libraries (1 for each county of the State); 308 libraries in educational institutions, of which 5 are universities, 14 colleges, 6 normal schools, 217 public high schools, 66 private schools and other institutions; 42 miscellaneous institution libraries, and 69 association or society libraries; 66 subscription libraries. In connection with the above libraries there are 204 branches and deposit stations. There are 104 library buildings, of which 93 were gifts, and of these gifts 76 were from Andrew Carnegie.

The legislature of 1911, by resolution, appointed a committee consisting of the State library trustees and the justices of the district court of appeal, third district, to investigate the need of a building for the library and the courts, and to report its findings to the governor prior to the legislative session of 1913.

COLORADO.

The Colorado board of library commissioners, established 1899, gives advice upon library matters through the Denver Public Library, and its publication of the library laws of the State has led to the establishment of libraries in a number of towns. The board has received no regular appropriation, and has no employees. Its membership consists of Charles R. Dudley, president, public library,

Denver; George M. Lee, secretary, Denver; Edwin H. Park, Harper Leiper, Alfred E. Whitaker.

The Colorado traveling library commission was established in 1903, through the efforts of the Colorado Federation of Women's Clubs, for the purpose of maintaining and developing the system of traveling libraries which had been inaugurated by the federation in 1899.

The aims of the commission are to make the traveling library of the greatest usefulness, by ascertaining the needs of isolated communities or districts, and supplying these needs as far as possible; to help small public libraries by supplying recent fiction, thus enabling them to invest their funds in reference and other books of permanent value; to lend books to study clubs; and to cooperate with the teacher in the rural school by providing good reading matter for the children.

Traveling libraries are loaned without charge to any town in the State upon application, the person to whom the box is sent being personally responsible for its safe return at the end of six months. The libraries are of three kinds: (1) Miscellaneous collections of 50 volumes each, intended for the use of the general public; (2) juvenile libraries of 50 volumes each, for use in country schools, Sunday schools, and industrial schools; and (3) small collections of reference books for the use of clubs and study classes. At the close of 1910 the traveling libraries numbered 241 boxes of 50 volumes each, with a total valuation of $12,000. Of these boxes, 96 were juvenile and 145 miscellaneous collections. In spite of a rapid increase in the number of boxes, the supply is still not equal to the demand.

The commission also distributes boxes of magazines and paper-bound books to farmers, mill men, railroad men, hospitals, engine houses, police stations, jails, reformatories, and prisons. These are not returned, but are used and passed on until worn-out. Through the cooperation of the club women in the different towns throughout the State, the work of establishing a chain of library stations for the distribution of periodicals has been undertaken.

The law provides that all members of the Colorado traveling library commission shall be women, appointed by the governor from a list submitted by the executive board of the Federation of Women's Clubs. The incumbents are Mrs. Julia V. Welles, president, Denver; Mrs. James D. Whitmore, Denver; Mrs. Z. X. Snyder, Greeley; Mrs. Frank Wood, Trinidad; Mrs. P. J. McHugh, Fort Collins.

The friends of library extension in Colorado have inaugurated a movement to amend the State constitution in such a way as to make it possible to create the office of State librarian, and concentrate all the library activities of the State in charge of this officer. Under this new head would be placed the State library (now in charge of the State superintendent of public instruction), the traveling library

(the commission going out of existence), the historical society, the teachers' reading circle, and the library commission; there would be established a legislative reference department, a library training school, and any other library activities that might be demanded by the people.

CONNECTICUT.

The expenditure of the annual State grant to public libraries is in charge of the public library committee, which also gives to communities advice and assistance in the organization and establishment of free public libraries, and extends to all such institutions aid in selecting and cataloguing books and in library management. In the performance of these duties numerous visits of inspection are made to libraries throughout the State both by members of the committee and by an official visitor appointed by it. Special emphasis has been laid on the right of neighborhoods remote from town centers to library service, and the formation of branch libraries has consequently been encouraged. During the fiscal year ending September 30, 1910, the State granted for books $8,459.86 to 92 public libraries out of a total number in Connecticut of 169.

An annual institute for the professional training of librarians is held at some accessible location for two weeks during each summer.

The traveling libraries handled by the committee consist of collections of a general character, circulated among neighborhoods and public libraries; libraries for school use, circulated among schools; libraries on special subjects, accompanied by pictures, loaned to clubs and libraries; libraries in foreign languages, circulated among neighborhoods and libraries; and home libraries, loaned to individuals and families. During 1910 the system of distributing home libraries by means of house-to-house delivery by a book wagon was tried in one town. It is reported that the number of books loaned and the enthusiasm in the town indicate that this undertaking will soon pass the experimental stage, and may profitably be extended so far as the appropriation will permit.

In addition to the collections owned by the committee, libraries loaned by the Connecticut Society of Colonial Dames, the Connecticut Audubon Society, and by women's clubs and individuals are circulated among neighborhoods and schools. The total number of volumes in all traveling libraries circulated by the committee is 8,347. The committee also has a large collection of miscellaneous pictures, partly owned by the committee and partly loaned by the Connecticut Society of Colonial Dames, which are distributed among schools and libraries.

School libraries in Connecticut have a grant from the State and are permitted to buy books through the public library committee. In 1910 there were in the State 1,550 schoolhouses, while 1,016 public

schools had libraries, containing 269,540 volumes. The number of libraries and volumes has steadily increased within recent years. The amount of library grant paid from the State treasury to 160 school districts during the fiscal year ended September 30, 1910, was $8,155, while the districts expended for this purpose $29,542.05.

The Society of Colonial Dames circulates through the committee traveling libraries and portfolios of pictures. These libraries are sent to schools, with transportation paid, and may be retained three months. The Audubon Society sends libraries, portfolios, and sets of bird charts to schools.

The members of the Connecticut Public Library committee are Charles D. Hine, chairman, and Caroline M. Hewins, secretary, Hartford; Henry A. Tirrell, Norwich; Edwin B. Gager, Derby.

DELAWARE.

The State library commission was established in 1901 to promote the establishment and efficiency of free public libraries in incorporated towns. In 1903 the law regarding the establishment of public libraries was amended so that now it is possible for any school district in the State to establish a public library. The commission has made an effort to have every incorporated town vote on the question of establishing a library under this law. Advice and assistance is given to towns in the establishment of libraries, and statistics of libraries are collected. An amount equal to one-half the minimum amount authorized to be raised in districts of its class may be given annually to each public library. This direct aid varies from $12.50 to $125.

The commission maintains a system of traveling libraries, which have been acquired by gift and by purchase. Each library contains about 50 volumes and is loaned free of charge for three months to (1) any school, Sunday school, college, or seminary upon application of its principal; (2) any village, town or community, study or other club, grange, post, lodge, business corporation, or other similar organization, which will form a library association of not less than five members; (3) any library upon application of its trustees or commissioners. A few collections of books for study are loaned to women's clubs, and special loans are made to teachers and also to individuals when possible to give assistance to those pursuing particular lines of study.

The commission states in its report for 1909–10 that it is encouraged by a growing public interest in the subject of free libraries, and a more general appreciation by the public of their importance, both in advancing the cause of education and raising the standards of culture and good citizenship.

In 1909 the traveling libraries were circulated 95 times; in 1910, 107 times. Including the women's clubs, study classes, and individuals,

there were 219 applications, and 5,192 books sent out in 1910. Within these two years 11 new libraries were added to the collection, making a total of 77 traveling libraries.

There are 4 libraries, each containing from 20 to 25 volumes, on special subjects—country life, domestic science, gardening, and poultry; also mission study libraries containing books relating to the various mission fields.

Many teachers in different parts of the State have written the commission to tell of the great help and advantage the traveling library books have been to the children in the schools and Sunday schools.

The members of the State library commission are Daniel W. Corbit, chairman, Odessa; Mrs. James W. Anthony, Smyrna; A. L. Bailey, Wilmington; Mrs. C. E. Burchenal, Wilmington; Henry P. Cannon, Bridgeville; Mrs. Charles R. Miller, Wilmington; Mrs. Henry Ridgely, Dover; G. W. Murray, Viola. The secretary is H. Ridgely Harrington, State librarian, Dover.

GEORGIA.

The Georgia library commission, of five members, was created by the legislature in 1897 to give advice and counsel to all communities in the State regarding the establishment and management of libraries. The commission may also send its members to aid in organizing new libraries or improving those already established. Because of impediments in the State constitution, no appropriation has been granted the commission since its organization, but through the cooperation of the Carnegie Library of Atlanta the commission has rendered much assistance to library undertakings throughout the State.

The members of the commission are Julia T. Rankin, chairman, Atlanta; Mrs. J. K. Ottley, Atlanta; Walter Brooks, Rome; Carleton B. Gibson, Columbus; Bridges Smith, Macon.

The tenth meeting of the Georgia Library Association, which was held in Athens April 17–19, 1911, was in many ways one of the most profitable gatherings in the history of the association. At the two general sessions Mr. Henry E. Legler, librarian of the Chicago Public Library, was the principal speaker. Chancellor David C. Barrow, of the University of Georgia, presented a paper, in which he suggested the solution of the problem of State support by the incorporation of the library commission with the extension work of the university. He believed the secretary of the Georgia commission, if located at Athens, "might give some portion of time to the university library, and operating with the other agencies of the university, probably with the work in secondary education, as this work is most nearly related to the towns, might advise and assist these towns in organizing libraries."

At the meeting of the Georgia Library Association in 1910 State School Commissioner Pound made a few remarks on the defective library conditions to be found in the country schools of the State. Georgia realizes the educational importance of proper library facilities, and there is reason to expect that effective measures of library extension will soon follow the reorganization of the public-school system by the act of 1911.

The Georgia Federation of Women's Clubs is prosecuting a useful educational work through its library committee, and elsewhere in this chapter an account is given of the Seaboard Air Line free traveling library system, with headquarters at Middleton, Ga.

IDAHO.

The State library commission, established in 1901, operates a system of traveling libraries under the control of the superintendent of public instruction, who is ex-officio secretary of the commission. The remaining members are the attorney general, secretary of state, and president of the University of Idaho. The libraries consist of 50 volumes each, and are loaned to any community in the State upon application of five taxpayers, remaining at each station four months. A competent person is appointed librarian and is made responsible for the books. The expense of transportation, which is a considerable item in Idaho, is borne by the commission.

The law requires that at least 3 per cent of all the moneys annually appropriated to the school districts shall be applied by the trustees for the maintenance of school libraries, and that books must be purchased from a list recommended by the State board of education. The State superintendent declares in her latest report (1909–10) that in all the districts where this law has been complied with the results have proved that it is a wise measure, and its enforcement has been of untold benefit to the schools. At the close of 1910, a total of 84,882 volumes in the school libraries of Idaho was reported, as against 77,102 volumes August 31, 1910, and 67,682 volumes August 31, 1909. The amount expended for libraries during 1908–9 was $19,995.47, and during 1909–10 was $20,741.87.

ILLINOIS.

The act providing for the establishment of the Illinois library extension commission became a law July 1, 1909. The members of the commission created by the law were appointed in September, 1909, by the State library commission, which is the governing body of the State library. They are James A. Rose, secretary of state, chairman; Mrs. Eugenie M. Bacon, secretary, Decatur; and Joseph H. Freeman, Aurora. An organizer was appointed in January, 1910, and assumed active duties March 1, 1910.

It is the duty of the commission to give advice and information to the librarian or trustees of any existing public library, or to any person or community interested in starting a new public library, concerning the organization, maintenance, or administration of any such. The commission shall operate traveling libraries, and through its organizer keep informed of the condition, scope, and methods of work of the various public libraries of the State. Its advisory work is done through the organizer by correspondence, or by personal visits wherever requested.

The Illinois Federation of Women's Clubs presented its traveling library collections to the commission, and the books from this source have been merged in the general stock for traveling library purposes.

After nine months of service devoted largely to field work, the organizer reported in January, 1911, that the commission law had proved to be entirely satisfactory, and that it covers all necessary lines. Public interest and cooperation had been everywhere manifested.

There are now but 27 counties in the State without a public library, out of a total number of 102.

The Illinois Library Association, at its meeting in October, 1911, appointed a committee to consider the need of a codification of the State library laws, and to report at the next annual meeting in 1912.

INDIANA.

The public library commission endeavors to secure the establishment of public libraries in localities able to support them, visits libraries for the purpose of giving advice and instruction, conducts a summer school for librarians, cooperates with the Indiana Library Association in holding district meetings, maintains a system of traveling libraries, and endeavors to bring about a closer relation between libraries and other educational agencies. The secretary gives much of his time to advisory work, through correspondence and in personal visits to towns.

The latest report of the commission, for the biennial period ending September 30, 1910, states that there are now in Indiana 125 public libraries, 22 of which have been added during these last two years, and 73 of which have been established since 1899, when the commission was organized. In 1906 there were 25 counties lacking public libraries; now there are 17. Fifteen cities out of a total of 94 do not have public libraries. Two of these 15 have large college libraries, and of the others only 4 have an assessed valuation of as much as $1,000,000.

In 1899 there was but one librarian in the State who had graduated from a library school. At present there are 49 librarians who have had a one or two year course, and 91 who have had a summer-school

course, making a total of 140 librarians and assistants who have had professional training. In 1908 there were 131.

For rural library extension Indiana employs a township plan which is meeting with marked success. Briefly stated, this law provides that a public library in any city or incorporated town may extend its privileges to all the people of the township or townships in which such city or town is situated, or to the people of any neighboring township in the same county, on the condition of contribution by said township or townships to the support of such library. The plan becomes operative when the library board of such public library signifies its consent, and when the township advisory board makes a levy, either on its own initiative or on petition by 50 resident taxpayers. The country patrons of the library are then entitled to the same grade of service as that enjoyed by the city residents.

The public-school libraries of Indiana vary in size from the small schoolroom collection of reading-circle books in the district school to the well organized high-school library of several thousand volumes with a trained librarian in charge. In the majority of towns and cities where public libraries have been established, the general library collections of the public schools have been transferred to the respective public libraries and only reference books have been retained in the school. In towns and rural communities which have no access to the public libraries it is interesting to note that almost every school has a collection of books. An examination of the reports submitted to the department of public instruction by the county superintendents of the State shows that in these town and rural school libraries there are approximately 510,000 volumes, 50,000 having been added during 1910. These libraries, to a large extent, are made up of books purchased from the Indiana teachers' and young people's reading circle, which, since its organization in 1888, has distributed 700,000 books throughout the State. Purchases were made during 1910 by every county in the State. The books, which are selected by the board of directors of the reading circle and are designed to furnish general culture reading for school children, include fiction, travel, biography, science, nature study, poetry, and history, and are graded to meet the needs of the eight grades in the common schools. These libraries are kept in the schoolhouses and are circulated only during the school year.

The following general statistics of school libraries in Indiana for 1909–10 are given by the State superintendent of public instruction: Volumes in libraries, 1,172,251; volumes circulated, 1,973,230; books added, 98,492; members of young people's reading circle, 103,135.

During 1909–10 the activities in the traveling library department developed rapidly. About 1,200 new books were purchased in this time, and the circulation largely increased. Two hundred and six

new stations were established and 81 stations previously established were served. The latest report gives 100 stations holding libraries and enough requests on file to cover the number of books on hand.

The books are loaned in three groups or classes: (*a*) Fixed general collection of 40 books; (*b*) fixed group on one subject varying in number of volumes from 12 to 20; (*c*) an open-shelf collection, from which special requests are filled and loans made in small or large groups, as the case may demand. This open-shelf collection was inaugurated in the spring of 1910 and is proving highly satisfactory.

Noteworthy library legislation was enacted by the general assembly of 1911. The law establishing the legislative reference department of the State library was amended so as to broaden the scope of the legislative reference work. The department is now authorized to collect material on municipal subjects and to furnish such material to city and town officers on request. It is also authorized to cooperate with the State educational institutions in any manner approved by the State librarian and the State library board.

The annual allowance of the public library commission for the next two years was increased from $7,000 to $10,000, and $100,000 was appropriated for a new library building for Purdue University.

The present members of the public library commission are Jacob P. Dunn, president, Indianapolis; Mrs. Elizabeth C. Earl, Connersville; and William W. Parsons, Terre Haute. Carl H. Milam is secretary and State organizer.

IOWA.

For over 10 years the Iowa library commission has been actively engaged in directing the extension work throughout the State, stimulating and aiding communities to provide local public collections of books. Struggling libraries are encouraged and fostered, higher standards of book selection are promoted, and the service that libraries may render communities, in making more intelligent citizens, is emphasized. As an active agent in this work the commission employs an organizer who is constantly engaged in the field. Small towns, and country neighborhoods also, that can not maintain public libraries, are provided with good literature by means of traveling libraries, under the direction of the commission. The growth of library interest in the decade has been most gratifying, though there remains much undeveloped territory in the State.

The report of the commission for the two years ending June 30, 1910, gives the number of free public libraries in Iowa as 106. One or more may be found in every county in the State, with the exception of 18, in several of which, however, there are association libraries likely to become eventually free public libraries.

Iowa has provided for rural library extension by enacting that public libraries may extend the free use of their books to those residing in the country adjacent to the town or city in which the library is located. This law provides that a township, through its trustees, may vote a tax to be paid toward the support of a public library in a neighboring town and in return enjoy all the privileges of the library. In regions where small villages exist these are made the centers of distribution; in other localities the book collections are placed in churches, schoolhouses, or farm residences. Interest, and even enthusiasm, have been aroused in the townships where this system has been inaugurated.

Each summer the secretary of the library commission conducts a summer school for library training at Iowa City under the joint auspices of the library commission and the State University of Iowa. For six weeks instruction is given in the fundamentals of library methods, with the needs of the inexperienced librarians of the smaller institutions and of teachers in care of school libraries especially in view. The eleventh annual session of the school was held in 1911.

The Iowa library commission maintains a traveling library system as an important feature of its work. The books may be loaned to local public libraries, to library associations created for the purpose, to groups of 10 taxpayers, to clubs, schools, and other organizations, and to individuals, free of cost except for transportation. Two distinct collections of books are kept: The regular libraries arranged in fixed groups of 50 volumes each, of a miscellaneous character for general reading, and the general loan or "open-shelf" collection, from which libraries are made up to meet the needs of applicants.

The increasing use of the traveling library during 1908–1910 is attested by the fact that the number of requests for books almost doubled that of the previous biennial period, being 2,271, as against 1,498 for 1906–1908. Each of these requests represents the loan of a varied number of volumes, amounting to a total number of 49,113 books. Back of these figures in most cases lies painstaking and careful examination of many books to find the material exactly fitted to the needs of the applicant.

The commission cooperates with the agricultural extension department of the State College at Ames, by the loan of books for traveling exhibits and for the short courses. Many agricultural clubs have thus been led to make use of the traveling library. The agricultural extension department has issued a study outline on "Home, school, and community life," for the use of clubs of farmers' wives, which was developed by the traveling library staff from topics furnished by the agricultural department. Lists of reference books and printed matter covering this outline are available from the traveling library.

The traveling library provides a list of books and references on the annual subject of debate, selected by the State high-school debating league. Many debating teams in small towns depend entirely upon the traveling library for their material, and would not be able to enter the contest without it. The commission also circulates traveling library debate collections on a series of subjects additional to those used by the high-school debating league. Close cooperation is maintained also with the Iowa Federation of Women's Clubs in connection with their study club work and with the State Young Men's Christian Association in boys' work.

The members of the Iowa library commission are Johnson Brigham, chairman, Des Moines; John G. Bowman, Iowa City; A. M. Deyoe, Des Moines; Mrs. Horace M. Towner, Corning; Mrs. David W. Norris, Grinnell; Mrs. Henry J. Howe, Marshalltown; Mrs. A. J. Barkley, Boone. Alice S. Tyler, Des Moines, is secretary.

KANSAS.

The traveling library movement in Kansas was begun by club women, who collected by donation for this purpose 3,000 books, which were placed under the supervision of the Kansas Social Science Federation. The law now in effect, which was passed at the legislative session of 1899, established the Kansas traveling libraries commission as an adjunct of the State library, and made an appropriation of $1,000 a year for its support. The 3,000 books and 34 cases, accumulated by the Social Science Federation, were transferred to the commission, and are still in use. The traveling library system has become an assured institution of the State, with no competitor as a popular philanthropic movement. The commission now has 35,000 volumes, and 525 cases for shipping the books, with a yearly appropriation of $5,000 for its support.

The traveling library is regarded as a public library for the State, serving the people in less populous districts as the public library of a city or town serves the people of its community, though the books circulate in a somewhat different way. Local libraries, or any group of people in Kansas, such as clubs, societies, reading circles, Sunday schools, or public schools, may have 50 books for six months for $2, to defray the cost of transportation. The libraries cover a wide range of subjects, and are made up as nearly as possible to suit the requirements of the subscribers. An extension of the period of loan may be arranged upon the payment of a fee of 25 cents per month.

The traveling library, with all of its possibilities, has especially appealed to and filled the needs of the people of Kansas, for public libraries are not yet numerous, notwithstanding the great development during recent years. To the traveling libraries much of this progress is due, as their visits have frequently been the first genuine

incentive the small town has had for a library of its own. There are some communities 40 miles from the nearest railway station which receive these books. The whole work has grown in extent beyond the most hopeful expectations of its promoters, and its influence and educational results are felt more widely over the State than could have been anticipated at the outset.

The commission now has five German libraries, which are sent out under the same regulations as the other books. A few special libraries have been purchased for correspondence courses in university extension work, conducted by the State University. There are three each on American history, American literature, psychology, and education, each containing from 4 to 13 books, which are sent out under special terms. Aside from the German books and the libraries just mentioned, the unit or fixed-group system is not in use in the Kansas traveling libraries. Every collection of books as it comes in is unpacked and placed on the shelves, a method which involves far more labor than the unit system, but which in some important respects is more satisfactory.

During the two years ending June 30, 1910, 1,000 traveling libraries, including 9 special libraries, were sent out, showing an increase of 196 over the figures for the preceding biennium. The service has reached 104 counties and 580 towns, many of which are regular patrons, ordering up to 8 libraries a year.

A collection of carbon photographic reproductions of the world's famous paintings, known as the "Aplington Art Gallery," has been placed under the care and management of the Kansas traveling libraries commission. These pictures were accumulated by the Kansas Federation of Women's Clubs, aided by personal contributions from Mrs. Kate A. Aplington, of Council Grove, Kans. The collection was offered to the State and accepted by the legislature of 1907. At the time of the latest report in 1910, the gallery comprised four practically complete collections—Italian, Dutch and Flemish, French, and English, and a partial collection of German reproductions, while a representative collection of American pictures was expected to be ready for use in the near future.

The Kansas traveling libraries commission is composed of James L. King, State librarian, chairman; Mrs. C. C. Goddard, Lucy B. Johnston, Julia E. Brown, and Harry G. Larimer. The secretary is Mrs. Adrian L. Greene.

KENTUCKY.

A library commission bill framed by a committee composed of members of the Kentucky Library Association and the Kentucky Federation of Women's Clubs was presented to the legislature of 1910, and after a vigorous campaign for its adoption was passed,

signed by the governor, and went into effect June 13, 1910. The five members appointed by the governor to compose the commission are Fannie C. Rawson, Louisville, and May Stone, Hindman, both appointed for a term of four years; Frank K. Kavanaugh, Frankfort, three years; Mrs. George Alexander Flournoy, Paducah, two years; and William B. Doherty, Louisville, one year. Hereafter one member will be appointed each year for a term of four years. These members serve without compensation, the executive officer of the commission being the secretary, to which position Fannie C. Rawson has been elected. An annual appropriation of $6,000 was made for the expenses of the commission, the purpose of which is to promote the library interests of the State by increasing the efficiency of libraries already in existence, by the establishment of new libraries in communities where none exist, and by means of a traveling library system to provide books and reading for communities and individuals without library facilities.

The traveling libraries circulated in the mountain districts by the Kentucky women's clubs have been given to the commission and form the nucleus of its traveling library collection. The Jefferson County traveling library, consisting of 17 cases, has also been given to the commission. From these collections, together with new books purchased, libraries in fixed groups of 50 each are being made up.

These libraries are loaned for six months, with the privilege of extension for a longer period or of exchange in less time if desired. Full supplies, with directions for the management of the library according to approved library methods, are sent with each box. In order to defray expense of transportation, with justice to all, a uniform charge of $2 is made. An agreement signed by five taxpayers is required, which contains a promise to keep the library in an accessible place, to loan the books without charge, to care for them well, and to return them in good condition at the end of the prescribed time.

Each library contains books for adults, young people, and children, and includes reading in fiction, travel, biography, history, and prominent topics of the day. A farmer's library of 15 volumes will be substituted for the same number in general reading in a regular library when desired, or a separate library of 15 agricultural books will be sent at an additional cost of 75 cents for transportation.

As a part of the traveling library system, the commission maintains an open-shelf collection from which books may be borrowed for study or reading upon subjects desired. This collection is being used by women's clubs and others, and will be found increasingly helpful as it is enlarged to meet the demands upon it. Only the cost of postage or express is charged, and the books may be retained 30 days or longer upon application.

This is but a beginning of the work which the commission expects to do in the future, both in the lines indicated and in others to be taken up later. For example, the public-school libraries will receive attention. So far the only work done with them has been the loan of traveling libraries and such help and suggestions as have been requested through correspondence. Another branch of work which must soon be undertaken is the reorganization of the State institutional libraries.

In addition to the traveling libraries circulated by the State commission, county systems are also maintained by women's clubs in a number of counties. A traveling library system is also operated by Berea College through its students and by the library at Henderson. Extension work is done in Fayette and Mason Counties by the city libraries at Lexington and Maysville, which are also county libraries, and other city libraries are likely to follow this example with reference to their respective counties. In Louisville, six branches, with stations and classroom collections, give a total of 226 centers. Lexington and Henderson also maintain substations in schoolrooms and other centers.

Twenty-two public libraries in Kentucky sent in reports for 1910 to the State library commission. The total number of volumes reported was 235,419, with 24,863 additions during the year.

MAINE.

The legislature of 1911 amended the act establishing the Maine library commission, prescribing its powers and duties as follows:

> The commission shall give advice to all school, State institutional, free, and public libraries, and to all communities in the State which may propose to establish libraries as to the best means of establishing and administering them; selecting and cataloguing books, and other details of library management; and may send any of its members to aid in organizing such libraries or assist in the improvement of those already established. It may also receive gifts of money, books, or other property, which may be used or held in trust for the purpose or purposes given. It may publish lists and circulars of information, and may cooperate with other State library commissions and libraries in the publication of documents in order to secure the most economical administration of the work for which it was formed. It may conduct courses or schools of library instruction and hold librarians' institutes in various parts of the State, and cooperate with others in such schools or institutes. It shall select the books to be purchased for traveling libraries and advise the librarian of the State library in reference thereto. Said commission shall perform such other service in behalf of public libraries as it may consider for the best interests of the State.

The State gives to each public library upon its establishment $100 worth of books, and annually thereafter an amount equal to 10 per cent of the local expenditures for the library. For this purpose the State appropriation for the fiscal year 1912 is $7,700, and for traveling libraries and expenses of the library commissioners $2,500.

Libraries of 50 volumes each are loaned to any free library in the State upon application of the librarian, or to any association composed of five or more persons residing in a town without a free library, upon payment of a fee of $2.50. Books and documents from the State library may also be loaned to any responsible citizen of the State, on written application therefor and payment of transportation charges.

At the 1911 meeting of the Maine State Teachers' Association, which has an active department of libraries, an interesting example of local extension in the way of cooperation between the rural schools and the library in Dover and Foxcroft was described by the librarian, and State Superintendent Payson Smith spoke on "The rural school and its library." The superintendent's report shows that 881 Maine schools had libraries in 1910, an increase of 120 over the number for 1909.

The members of the commission are Mrs. Kate C. Estabrooke, president, Orono; W. H. Hartshorn, Lewiston; Mrs. Lizzie Jewett-Butler, Mechanic Falls; J. H. Winchester, Corinna. The secretary is H. C. Prince, State librarian.

MARYLAND.

The legislature of 1902 passed two library laws and established two commissions. The more important bill, introduced under the auspices of the State Federation of Women's Clubs, provided a commission of seven members, comprising the State librarian, superintendent of public education, and librarian of the Enoch Pratt free library, ex-officio, and four persons biennially appointed by the governor, two of them to be women. An annual appropriation of $1,000 was made for the commission, who served without pay, but received actual expenses. Their duties were to "give advice and counsel to all free libraries and public-school libraries in the State, and to all committees proposing to establish them, as to the best means of their establishment and maintenance, the selection of books, cataloguing, and other details of management." The commission was also empowered to organize and conduct traveling libraries throughout the State, and proceeded immediately to do so. In 1905, a field secretary was sent into the counties for a few months, this being the first appointment of such an officer in any State south of Mason and Dixon's line.

The other bill enacted in 1902 established a commission of five, appointed by the governor for a term of five years, with an appropriation of $1,000 per annum for its work. This commission's powers were limited to aiding the establishment of county libraries, and the law applied to only nine counties in the State.

Two bills relating to libraries were passed by the legislature of 1910, one of which repealed the act of 1902 establishing a county library commission, and the other was a revised library law for the State, prepared by the Maryland State library commission. That commission had as its functions the care of traveling libraries, also advice to the authorities governing public libraries of municipalities and schools and to persons endeavoring to establish such libraries. The new law changes the commission's title to "Maryland Public Library Commission," and confers the additional functions of advising and stimulating the establishment of county and election district libraries, and of purchasing and sending $100 worth of books to libraries established under this act. An annual appropriation of $1,500 was granted, which the commission finds inadequate for its work.

The report of the commission for 1910 states that it has 91 traveling libraries, made up of fixed collections of books, which have been circulating throughout the State and have been in great demand. The groups are both general and special in character, including several pedagogical libraries. This branch of the service could with benefit be greatly extended if funds were available. It was possible to employ the services of a field secretary during only half of the year.

The members of the Maryland Public Library Commission are M. Bates Stephens, State superintendent of public education, president; Mrs. John M. Carter, Mount Washington; Sterling Galt, Emmitsburg; Mrs. M. A. Newell, Baltimore; Joseph B. Perkins, Towson; Miss Lynn M. Shaffer, State librarian, Annapolis; Bernard C. Steiner, secretary, Baltimore.

The Washington County free library, of Hagerstown, furnishes a notable example of service to its rural constituency. It is supported partly by income from its endowment and by an annual appropriation from both county and city. It has also been the recipient of a gift of $25,000 from Mr. Andrew Carnegie, to be used for the extension of work in the county. It is operated by a central library, with children's room, reading rooms, etc., and 73 stations at as many points in the county. These stations are served by cases holding about 50 volumes each, which are placed at the general store, the post office, or other public place, being subject to exchange every 60 or 90 days. Thirty of these stations are located off the line of either railroad, trolley, or stage. To facilitate the transportation of the cases, and also for the purpose of house-to-house delivery, a book wagon makes trips throughout the county. Sixteen routes have been laid out, and the wagon is on the road at least two days in the week when the weather permits. This library, which possesses 20,000 volumes, reports a circulation for 1910 of 107,741 volumes.

MASSACHUSETTS.

Massachusetts was the first State in the Union to create a library commission for encouraging the establishment of libraries by direct aid, and for giving advice relating to the maintenance and administration of libraries. The law to this effect was enacted in 1890, and authorized the commission to give each town $100 worth of books upon the establishment of a library in accordance with an earlier act relating to the election, powers, and duties of trustees of free libraries. In 1890, 103 towns were without a free public library, and by 1904, every town in the State enjoyed the privileges of such an institution. Massachusetts now has the distinction of being the only American State which has a public library in every town.

In 1892, an act was passed authorizing the commission to give $100 worth of books to those towns of less than $600,000 valuation which had established libraries previous to 1890. To still further aid the poorer towns, the commission was authorized in 1900 to give an additional $100 worth of books to the towns of less than $600,000 valuation. Again, in 1906, an act was passed whereby the commission might annually expend a sum not exceeding $2,000 in aid of free libraries, especially in towns the valuation of which does not exceed $600,000. This law is more elastic than the previous acts, and "aid may include the furnishing of books in small quantities, visits to libraries, the instruction of librarians, and such other means of encouraging and stimulating the small libraries as said commissioners shall deem advisable." An act of 1910 authorizes the commission to appoint an agent.

In addition to the service rendered without compensation by the individual members of the commission, an unpaid board of advisory visitors was organized in 1908, the members of which visit small libraries, report to the commission the conditions which they find, and make recommendations. In this way the "personal touch" has reached most of the smaller and many of the larger towns. The board of advisory visitors for 1910–11 numbers 28 members, and during 1910 more than 80 libraries were visited by them, in addition to rendering advice in answer to inquiries by personal consultation, mail, or telephone.

During 1910, the commission, with the aid of the Woman's Education Association of Boston, supplied 94 towns and villages with traveling libraries. Thirty-three sets of pictures were circulated during the year.

A noteworthy feature in the reports for 1910 of Massachusetts libraries to the commission is the increasing attention paid to work with schools. Most of the libraries report special privileges to teachers and pupils, liberal provision of books needed for study, and

reference help given by the library. In many places the school is employed as a distributing agency, loaning books for general reading both to children and to adults. In towns where the population is scattered, and the library has only a small income, this plan makes the books generally available at little or no expense. In cities, also, this method proves its value, bringing the books to children and families who have not yet learned to use the library or who live too far from a library building to use it readily. Direction by the teacher of children's reading is so beneficial to the regular school studies that there is an increasing feeling that teachers should be given more training in the use of a library, the relative value of different children's books, and the larger use of reading to supplement the work of the textbook. The normal schools, the teachers' institutes, and the meetings of school superintendents give opportunity for such training and for increasing the interest of the teachers. The commission hopes, through cooperation with the State board of education, to bring about increasing attention to the library and its possibilities and more definite instruction to teachers.

Members of the commission: Charles F. D. Belden, chairman, Cambridge; Elizabeth P. Sohier, Beverly; Frank H. Howes, Newton; Hiller C. Wellman, Springfield; Anna M. Bancroft, Hopedale. Agent, Zaidee Brown, State library, Boston.

MICHIGAN.

The State board of library commissioners encourages the establishment of town libraries by means of the registration system, and works in cooperation with the State library, the department of public instruction, county commissioners of schools, women's clubs, and county organizers of village and rural libraries. Under the registration plan, any library which is free to the public and which has on its shelves 100 books, not counting Government and State documents, may borrow from the board of library commissioners 100 books to be kept six months. Upon a further purchase of books, another loan will be made, equal to the number purchased. This loan will be made to township, district, and school libraries, if free to the public.

In 1907, a county organizer was appointed to carry on library work on educational lines. Visits have been made to the more isolated parts of the State, and library matters have been presented at State and local teachers' associations, teachers' institutes, farmers' institutes, and the State fair.

The courses in elementary library training given at the summer normal schools, in session from June 27 to August 6, 1910, were reported as the most successful of any which have been carried on since the commencement of the work. The object was to give a

training for teachers, with special reference to those teaching in the rural schools. The instruction was simple and practical, the expectation being that the libraries which come under the charge of those teachers will range from 50 to 500 volumes. The classes were conducted at the Marquette and Kalamazoo normal schools, and at the Ferris Institute, Big Rapids. A very complete display of library tools and a model library of 500 volumes for children, together with a collection of books suitable for the use of teachers in the rural schools, were placed in the classroom, and this material was examined by a large number of students and others. These courses were repeated in 1911.

Through the efforts of the State board of library commissioners, a library section was in 1907 incorporated in the program of the Michigan State Teachers' Association, and at the meeting of the Upper Peninsula Educational Association at Negaunee, in October, 1910, a library section was added to that body. Exhibits of library utilities and books, and examples of the loan collection of pictures are displayed at the annual meetings of these associations, and receive much attention.

The traveling libraries are under the direction of the State librarian and are loaned to towns and villages upon application of a group of 20 or 25 taxpayers. Farming communities may apply under organizations such as granges, farmers' clubs, women's clubs, Epworth leagues, and similar bodies, and any society formed for the purpose of study. An annual fee of $5 pays the transportation both ways on four libraries; $1.25 pays the transportation both ways on one library. The regular libraries, which may be kept three months, with the privilege of three months' extension, are made up in sets of 50 volumes for general reading. To aid the club women of the State, special libraries made up on the program of club work are prepared and are loaned under the association application.

A legislative reference department was established in the State library in 1907. The first work of the new department was collecting information in regard to the constitutions of the various States, to aid in the work of preparing a new constitution.

Steady progress in all lines of the commission's activities is shown in its latest published report, that for 1910. Its members are Frederick J. Baldwin, president, Coral; H. R. Pattengill, Lansing; Henry Nelson Loud, Au Sable; David E. Heineman, Detroit; Mrs. Mary C. Spencer, secretary, Lansing.

MINNESOTA.

The creation of the Minnesota Public Library Commission by the legislature of 1899 may be regarded as a recognition of the public library as a part of the educational system of the State. In carrying

out the purpose of the law, the commission has constantly kept in view the development of the library system as an adjunct to the school, following two general lines of work: First, encouraging the establishment of libraries in all communities able to support them, and bringing to the highest possible standard of efficiency all the libraries in the State; and, second, maintaining a system of traveling libraries to aid in solving the problem of making free books accessible to the entire population of the State.

The commission endeavors through every possible means to obtain a thorough knowledge of library conditions throughout the State, in order that its advice and assistance may be adapted to local needs. In towns where no libraries exist, whenever conditions are favorable an effort is made to arouse public interest through the cooperation of individuals or local organizations. When a library is established either by an association or under municipal control, the commission gives advice regarding organization and equipment and sends its organizer to assist the local librarian in classifying and preparing the books for circulation and installing the necessary business records. To libraries already established, the commission continues to act as a bureau of information, giving advice through correspondence and personal visits as to selection of books, technical details, matters of administration, and questions of library policy. During 1909–10 161 visits were made by members of the commission staff to 103 libraries in 96 towns.

Closer correlation between school and public libraries has been sought, and to this end the commission has been represented at six teachers' meetings during 1909–10, and held an exhibit at the meeting of the Minnesota Educational Association showing the books listed in the "Teachers' Assistant," a publication of the commission, and other aids in book selection and library methods for school libraries. Arrangements have been made to continue the presentation of library work at teachers' meetings in the future. The commission reports that the school libraries are showing a remarkable change; that superintendents and school boards are becoming more interested in having the libraries organized and put on a working basis in order that they may be more useful and effective, not only for teachers and pupils, but also for the people of towns in which there is no public library. The question of book selection and the teacher's responsibility for the children's reading is also receiving more attention, and the growth of the idea of making the school a social center is enlarging the use of the schoolhouse and making it a more suitable location for a public collection of books.

The commission conducts each year a summer library school, offering an elementary course of six weeks. The twelfth annual session was held in 1911, with 22 librarians in attendance.

Since 1909 the commission has included in its field work the State charitable and correctional institutions, and the libraries of these institutions have received personal attention from a special organizer.

When the commission began active work in January, 1900, there were 30 public libraries established under State law and maintained by taxation, 5 free libraries supported by associations, and 13 subscription libraries. The number of public libraries has now increased to 78, while there are 29 free libraries maintained by associations, and 10 subscription libraries which charge a fee for the use of the books, making a total of 117 circulating libraries. The latest report of the commission mentions, besides progress in various towns, encouraging recognition of the value of the library, shown by enlarged appropriations at Minneapolis, where the tax levy has been increased to eight-tenths of a mill, yielding an annual income of about $160,000, of which $50,000 was to be spent at once in building and equipping new branches.

According to a law passed in 1905, any library board may "contract with the board of county commissioners of the county in which the library is situated or of adjacent counties, or with the village trustees or governing body of any neighboring town, city, or village, to loan the books of said library, either singly or in traveling libraries, to the residents of said county, town, city, or village, upon such terms as shall be agreed upon in such contract." This law authorizes two distinct plans: (1) That of county extension, whereby a centrally located library may extend its privileges to all residents of the county upon contract made with the county commissioners, and (2) that of township extension, whereby a library may extend its privileges to adjoining townships or villages upon contract made with the governing body of the township or village. Under the county extension law and otherwise, 34 libraries are now open without charge to borrowers living outside the limits of the municipality.

The widespread interest in civic improvement throughout the State has developed a larger feeling of civic pride in all public institutions. The library is feeling this stimulus, and its influence as a factor in municipal life is receiving more and more recognition. In this connection there is a growing use of the library as a social center, and certain phases of this development are noteworthy. For example, the work of the Civic League at Mankato has been closely associated with the library, the librarian being president of the organization and the library being the headquarters for the junior work. The same relationship exists in several other places. Most of the small library buildings are provided with auditoriums which are used regularly by study clubs, and occasionally for lectures, concerts, and similar entertainments.

The purpose of the traveling library service in Minnesota is primarily to bring to the people living on the farms and in isolated communities books for information, culture, and entertainment, which they are unable to obtain otherwise because of the distance from public libraries and the difficulties and expense of transportation. These libraries prove also a valuable adjunct to the small public libraries having insufficient book funds, by supplying them with fresh books, desirable books for children in good editions, and books in foreign languages; and the reference department of the traveling library is the base of supply for additional help for students and club workers.

Traveling libraries are loaned to library associations formed by ten signers of application cards, to farmers' clubs, and to small public libraries, and it is aimed to establish a permanent library center in every community. For regular traveling libraries no charge is made except for transportation, and to equalize this expense a uniform fee is charged to all places and the commission pays the freight charges both ways. For a 50-volume case the fee is $1; for a 25-volume case, 50 cents; and for a 25-volume case of foreign books, $1. The "fixed group" plan is used for collections for general reading, while adaptation to the various localities is attained by the addition of books especially desired, groups of books on a special subject or in foreign languages, and whole subject libraries for study.

Upon the request of the extension division of the school of agriculture, the collection of books on agriculture owned by the traveling library was increased by the addition of "farmers' libraries," each consisting of 25 books on agriculture and 25 books for general reading. The titles on agriculture were selected by the school of agriculture, only those being included which had been tested for value and usefulness, and the books for general reading were chosen with special regard to their interest in rural communities.

Many university students are teaching in the rural districts of Minnesota and continuing their studies meanwhile. For their use books on psychology, child study, and teaching were purchased from a list selected by the department of pedagogy of the University of Minnesota, and additions have been made from time to time as demand warranted. The books are loaned singly or in groups to students, and libraries of 25 volumes have been loaned to city or county superintendents for the use of their teachers. The books are sent upon application of a student having a guarantor for transportation charges only. The books recommended by the various departments of the university offering correspondence courses have also been purchased, and are loaned singly or in groups to students living away from public libraries.

The commission reports that requests come in increasing number and variety, not only for books for general reading, but also for books of practical information and for study in many fields, and that there is opportunity for great extension of the work of the traveling library in Minnesota. To effect this extension, increased room and resources are necessary.

Members of the commission: Margaret J. Evans, chairman, Northfield; Gratia A. Countryman, Minneapolis; George E. Vincent, president of University of Minnesota; C. G. Schulz, State superintendent of public instruction; Warren Upham, secretary of Minnesota Historical Society, St. Paul. Secretary, Clara F. Baldwin, St. Paul.

MISSOURI.

The Missouri library commission was established by the legislature of 1907, and consists of five members, three of whom are appointed by the governor; the State superintendent of public schools, and the president of the State university complete the membership. The commission is authorized to give advice to all school, free, and other public libraries, and to all communities which may propose to establish them; it may receive gifts of money, books, or other property, operate a system of traveling libraries, and in general aid in the development of libraries throughout the State.

A new departure was taken June 1, 1910, in the employment of a field worker, to present personally the subject of libraries in the counties of the State. The commission reports that the results have justified this step. In placing traveling libraries a goodly advance has been made, and the interest aroused has promoted the library movement in the State. During 1910 the commission assisted public libraries in 11 Missouri towns.

The places reached by traveling libraries in 1910 number 141, while 90 was the record for 1909; libraries sent out number 242 in 1910, 69 more than in 1909; these libraries contained 11,377 volumes, and the reported circulation was 19,780 volumes, more than double that of the year before (8,922 volumes). The development of the department of general loan for clubs, farmers' institutes, and students has placed 443 volumes in the field from the general collection. Great demand has been made on this department by the smaller high schools of the State.

The stock of traveling libraries has been increased during 1910 by the addition of 44 groups, distributed among the fixed group, general in scope; school libraries, middle grade; special libraries for colored rural schools; and juvenile libraries. In all 171 groups, varying in size from 40 to 50 volumes, are now owned by the commission. In December, 1910, 152 of these were in the field, located in 64 counties

of the State. Some of these places report a circulation of nearly 500 volumes for a six months' period of loan, the average being 175 volumes each time the library is loaned. The total number of issues reported in this way was 19,780 volumes. A number of new patrons were secured for the traveling libraries by the exhibit at the State fair, October, 1910. In the book purchases for the year, much attention has been given to the development of the collection on agriculture.

The general assembly of 1909 passed a bill creating a general assembly library, to consist chiefly of the legislative journals and State documents, but opening the door to progressive reference work for the legislature. The library thus collected is to be supervised by the secretary of the library commission, under the direction of the house and senate during sessions, and to be at other times in charge of the library commission alone. No appropriation was made for this work, but considerable progress has been made in organization.

The members of the Missouri library commission are J. P. Greene, president, Liberty; Adelaide J. Thompson, Jefferson City; Arthur E. Bostwick, St. Louis; A. Ross Hill, president of University of Missouri; William P. Evans, State superintendent of public schools. The secretary is Elizabeth B. Wales, Jefferson City.

NEBRASKA.

The public library commission of Nebraska was established in 1901, chiefly for the encouragement of the establishment of libraries, the improvement of those already established, and the extension of reading facilities by means of traveling libraries.

The report of the commission for 1909–10 states that Nebraska now has 76 public libraries, as compared with 67 in 1908 and 26 in 1901. There are only three towns in the State having a population of over 2,000 which are without libraries, and one of these has an excellent Y. M. C. A. library which furnishes the town with reading.

During the biennium the commission has given assistance in organizing 13 new libraries. The secretary visited 51 libraries, and in addition to making personal visits has carried on a large correspondence, giving advice in regard to organizing and administering libraries. With almost no exception Nebraska libraries have good systems of administration, and the standards of librarianship are unusually high.

The general traveling libraries are composed of from 40 to 50 volumes of miscellaneous books for adults and children. Each library is made up of a fixed group of 35 volumes of popular works, to which from 5 to 15 volumes are added to suit the needs and tastes of the community to be served. In addition to the general libraries there are several school libraries containing books for children

only—books of general interest and books for supplementary reading. Libraries are loaned to any community upon payment of transportation charges. From the general loan collection books on special subjects are loaned to study clubs, teachers, schools, and individuals.

During 1909–10, 17,932 volumes were sent out in response to 442 requests for general traveling libraries, as against 17,280 volumes and 432 requests for the preceding two years. In the special loan work 4,921 volumes were sent out in response to 636 requests, as against 2,789 volumes and 388 requests for the preceding two years. During 1909–10 books were sent to 83 counties, showing a wide distribution over the State. The commission has 25 libraries in the Bohemian language, which were out 94 times from 1908 to 1910, and were used by 26 towns.

There is no provision made in the school library law for the method of selection and purchase of books, but the commission has printed a list of books suitable for a school library, and teachers and directors are urged to buy from this list. Many talks are given by the secretary at teachers' institutes and normal schools, and correspondence on the subject of book selection is extensive. The secretary also serves as an advisory member of the reading circle committee, which makes up each year suggestive lists of books for school libraries.

The library commission has recently cooperated with the university extension department of the State University, and has supplied students taking the course on Abraham Lincoln with the necessary books for study. For this purpose the commission bought 16 sets of the complete works of Abraham Lincoln and 20 copies of standard biographies. The commission reports that the constant use of these books has justified their purchase, and that it is considering the further development of this line of work.

The legislature of 1911 granted the library commission, for the maintenance of its general operations during the biennium beginning April 1, 1911, the sum of $10,000, an increase of $2,000 over the allowance for the preceding two years. It also put the supervision of the libraries in the State institutions in the hands of the commission, and made an appropriation for the biennium of $5,000 for this work. An institution librarian has been appointed by the commission. This is the first official recognition of the library as an agent in reformatory work in the State institutions of Nebraska.

The members of the Nebraska Public Library Commission are F. L. Haller, president, Omaha; Samuel Avery, chancellor of University of Nebraska; J. E. Delzell, State superintendent of public instruction; H. C. Lindsay, State librarian; W. K. Jewett, librarian of University of Nebraska. The secretary is Charlotte Templeton, Omaha.

A new law for the establishment and regulation of public libraries was enacted by the legislature of 1911, authorizing any city, incorporated village, county, or township to establish a free public library, or to contract for the use of a public library already established, and to provide the necessary funds by taxation. Any school district also may authorize its school board to contract for the use of a public library by the inhabitants of such district. Previously only incorporated villages and cities could establish libraries and tax themselves for their maintenance.

The legislature of 1911 also established a legislative reference bureau for the service of legislators, State officials, and citizens generally, by means of a special library, publications, and other sources of information. The bureau is affiliated with the department of political science and sociology and with the college of law of the University of Nebraska, and is under the rules and regulations of the board of regents of the State University.

NEW JERSEY.

The public library commission assists public libraries by giving advice and personal assistance in organization, distributes State aid to libraries, and has charge of the system of traveling libraries and the libraries in penal institutions. Each public library of less than 5,000 volumes, upon its establishment under municipal control, receives $100 from the State.

The annual fee for the use of the traveling libraries is $2, to be paid in advance. The collections are not restricted to fixed groups, but the books are selected to suit the applicants. Charges for conveying the libraries to the express office or railroad station nearest their destination, and for their return to Trenton, are borne by the commission. Traveling libraries are loaned to communities that are without library facilities, on the application of taxpayers, who must select a trustee and librarian to become responsible for the proper care and distribution of the books.

The commission reports that during 1910 steady and continued interest was shown in its work. Fourteen public libraries were organized, bringing the total number in the State up to 208, as compared with 76, partly inactive, listed by the New Jersey Library Association in 1900. Twenty-one traveling library stations were also established, making the total number 237; 811 traveling libraries were sent out, containing 40,500 volumes, which, with the special loans included, aggregate 41,613. Approximately 118,500 volumes were circulated through these libraries, at an expense for transportation of $603.93. Seven libraries were reorganized; 282 visits were made; 164 libraries were given aid by advice, instruction, book lists, and suggestions in purchasing books and furniture;

libraries in 33 State correctional institutions were supervised; 74 addresses made; 31 programs made out for clubs and 28 for study classes and granges; book lists furnished to 47 clubs and 31 granges; bulletins, pictures, and exhibits loaned to supplement books on various subjects; 2,545 volumes were purchased and 200 received as gifts.

Of the 237 traveling libraries, 153 are in rural districts, being under the charge of the granges, farmers' clubs, agricultural societies, and farming communities; 27 of them are in use by libraries with incomes too small to supply the towns with books without this help; and the remainder are stationed in small communities, only three of which are towns of over 3,000 inhabitants.

The funds available have not permitted a greater enlargement of the scope of the traveling library work. There have been many more requests than could be filled, new stations being made only where the need seemed urgent. At the close of 1910 there were still over 600 small communities in the State absolutely without library facilities.

Besides the regular work of the traveling libraries, individual loans have been made to meet the need of books for study. During 1910, 1,113 volumes were circulated in this way.

The New Jersey Federation of Women's Clubs sent out in 1910 17 boxes and barrels of books to traveling library stations and small communities, besides giving books directly to the commission. It also paid for the services of a librarian who served seven stations.

To further the work in rural districts, the commission is cooperating with the State department of agriculture. Arrangements have been made for talks by a representative of the commission before farmers' institutes in 16 different districts upon books for farmers.

From 1907 to 1910 there was held, under direction of the commission, an annual summer school of elementary library science, which in 1911 was replaced by a week's institute for advanced work.

Members of commission: W. C. Kimball, chairman, Passaic; M. Taylor Pyne, Princeton; E. C. Richardson, Princeton; Howard M. Cooper, Camden; Everett T. Tomlinson, Elizabeth. Secretary, Henry C. Buchanan, Trenton.

NEW YORK.

The regents of the University of the State of New York are empowered by law to incorporate, aid, and supervise public libraries, and, in general, to "extend to the people at large increased educational opportunities and facilities." They employ as their official agency for carrying on these operations, under the supervision of the director of the State library, the division of educational extension of the State education department. The following are the important lines of activity:

1. To promote the establishment and operation of good public libraries. This is the particular duty of the chief of the division, the inspector, and the two library organizers. After preliminary correspondence, communities proposing to establish public libraries are visited and assistance rendered in organization and incorporation. It is expected that each library, new or old, shall receive an official visit each year. The organizers, who are librarians of experience, are each prepared to spend as much as two weeks in any place where their aid is needed by a new or small library. The service is rendered without cost to the libraries, except that, when an organizer remains more than one day in a place, the local expense of her stay is borne by the aided library. Printed lists of approved books are prepared and furnished at frequent intervals, and aid is given in preparing plans for library buildings. There were, at the close of the year 1909–10, 462 libraries, including branches, connected with the division by incorporation or registry, or both.

2. To distribute public library money. The State appropriation in aid of free libraries has reached the sum of $30,000 a year. Under the present rule a library or branch library may receive not more than $100 from the State in any fiscal year, and this with an equal sum from local sources is used in buying approved books.

3. To receive and compile annual reports from all libraries in the State. For the year ending July 31, 1910, reports were received from 1,345 libraries, containing 10,094,246 volumes, of which 137,021 were added during the year. The free circulating libraries of the State, numbering 710, had 4,341,103 volumes and circulated 19,254,729 in the year, or at the rate of 2,387 for each 1,000 of population. In 1893, when the extension work of the State began, the rate of free circulation was 352 to each 1,000 persons, showing a sixfold proportional increase in 17 years.

4. To administer the State system of traveling libraries. This involves selecting, buying, cataloguing, and handling thousands of books every year, and, in connection with the registry of study clubs and assistance rendered in that direction, requires the constant service of 11 persons. There is now, in 1911, a collection of 45,000 volumes available for traveling libraries. There are 65 regular fixed collections of 25, 50, or 100 volumes each for general reading. Five sets of each library have been provided and some have been duplicated ten times.

The great bulk of the collection, however, consists of books which are subject to selection for reading on some particular topic. The traveling libraries are sent to groups of people on petition of five taxpayers in each case, to public libraries, to schools, to granges, and like organizations, and especially to registered study clubs.

House libraries of 10 volumes each are also sent to responsible borrowers. Bookcases and printed lists of the fixed libraries are furnished, and a small fee is charged to cover the cost of transportation. During 1909–10, 819 traveling libraries, containing 45,142 volumes, were loaned.

5. To promote the establishment of study clubs. Any five or more persons within the State agreeing to follow a certain course of study for not less than 10 meetings, covering a period of not less than ten weeks, may apply to the division for registry, and when their course is approved they are as a study club entitled to such aid in the preparation of their program as the office can render, and to the loan of books relating to the subject of their study. If any of the books needed are not already on hand, they may be bought for this use. The books are lent on the same terms as traveling libraries containing an equal number of volumes, and are for the exclusive use of the members of the study club while in their charge. Since this work began 1,000 such study clubs have been registered.

6. To cooperate with the New York Library Association in holding library institutes and library round table meetings. The library round table movement is a systematic effort to bring together once a year small groups of librarians and library trustees in a very informal way for mutual acquaintance and profit. Every library is invited to join some convenient group. Topics for discussion are proposed or selected, and a special visitor or conductor is assigned for each meeting. The sessions are short, but opportunity is given for a full and frank interchange of views and for stating the results of experience. The sixth annual series of these round table meetings was held from April 20 to June 9, 1911. The series consisted of 30 meetings, with a total attendance of 760 persons, representing 302 libraries, which was somewhat less than in 1910, but shows a gain of about 50 libraries over any other preceding year.

The New York State Library has a well-developed legislative reference section, which renders excellent service.

The disastrous fire of March 29, 1911, compelled a suspension of many of the public activities of the State library until the occupancy of the new Educational Building, which is expected to be ready, in part at least, early in 1912. Other lines of work have been continued with more or less interruption. Between 40,000 and 50,000 volumes belonging to the traveling library system were out in the State at the time of the fire, and are available for further circulation. The entire library is being restored as rapidly as circumstances permit.

The recently organized library section of the New York State Teachers Association held its first meeting at Rochester, December 28, 1910, in connection with the sixty-fifth annual meeting of the

parent association. The program was interesting, and the attendance large. One of the most important and helpful features of the meeting was a comprehensive and carefully arranged exhibit of school library aids, methods, and supplies. A similar program and exhibit is announced for the meeting at Albany in November, 1911.

The New York Legislature of 1911 authorized the establishment by popular vote of a county library system, or securing library privileges for the people of a whole county by means of a contract between the county board of supervisors and any public library in the county. Previously there was no provision for action as a unit by a county in library matters, and the outcome of this new enactment is awaited with interest.

NORTH CAROLINA.

The North Carolina library commission was established by the general assembly of 1909, and active work was begun September 15 of the same year. The commission consists of five members, two of whom are appointed by the North Carolina Library Association and one by the governor; the State librarian and the superintendent of public instruction are members ex officio. At present the members are Louis R. Wilson, librarian University of North Carolina, chairman; Mrs. Sol Weil, vice chairman, Goldsboro; Dr. Charles Lee Smith, treasurer, Raleigh; J. Y. Joyner, superintendent of public instruction; Miles O. Sherrill, State librarian. Executive officer, Minnie W. Leatherman, secretary, Raleigh.

The commission aids in organizing new libraries and in improving those already organized; it gives advice and assistance to all libraries in the State and to all communities which may propose to establish libraries as to the selection of books, cataloguing, maintenance, and other details of library management; and it maintains a periodical exchange and a clearing house for State reports. The commission is authorized to establish and maintain a system of traveling libraries, but owing to lack of State financial support this work has so far been obliged to depend upon donations of books and money from the library extension department of the Federation of Women's Clubs, and from individuals. The commission requests from the legislature an annual appropriation of $2,500 for the establishment and operation of traveling libraries.

In addition to the instruction given in its office and on personal visits, the commission conducts a summer school for library training, lasting six weeks, as a regular department of the University of North Carolina summer school, and in connection with the university library. The course includes use of libraries for students, and technical branches for librarians and for teachers in charge of school libraries.

The commission has established a close connection with the schools by giving advice regarding the care and use of school libraries, and help in the selection of books. A bulletin on school libraries, prepared by the secretary of the commission, was published and distributed by the superintendent of public instruction to all school libraries in the State. Other literature on the subject has been distributed by the commission, and talks have been given at teachers' meetings to arouse the interest of superintendents and teachers in building up good school libraries.

The general assembly of 1911 passed a public library law, providing that upon the petition of 25 per cent of the registered voters of a city or town the question of the establishment of a free public library shall be submitted to the voters. It provides also for the maintenance of the library when established, by means of special taxation, and for its government by a board of trustees. At the time of the passage of the act only 12 towns in North Carolina had free public libraries. Within 62 counties in the State there were no public libraries, and 15 counties had only one library each. A movement largely to increase this number is now in progress.

To carry on its work the commission receives an annual appropriation of $1,500. Of this amount $1,000 is spent for salaries, leaving but $500 yearly for traveling expenses of the members of the commission and of the secretary, for office equipment and supplies, for the publication of the bulletin and similar activities, for traveling libraries, for printing, and for miscellaneous expenses. With such limited means the work of the commission is necessarily restricted.

The State library has been thoroughly reorganized under the direct supervision of the secretary of the commission, which has also supplied reorganizers for two North Carolina college libraries.

NORTH DAKOTA.

The legislature of 1907 created a public library commission consisting of three members—the president of the North Dakota Library Association and the superintendent of public instruction ex officio and one member to be appointed by the governor. The legislature of 1909 added two members to the commission, the secretary of the State Historical Society ex officio and one member to be appointed by the governor.

It is the duty of the commission to circulate traveling libraries, to give advice and instruction upon any matter pertaining to the organization, maintenance, or administration of libraries, to encourage the formation of libraries where none exist, to keep statistics of the free public libraries of North Dakota, and to maintain an educational reference library and a legislative reference bureau.

The system of traveling libraries formerly circulated by the State superintendent of public instruction is now in the care of the library commission. These libraries consist of fixed groups of 40 or 50 books for general reading and study by adults and children, and are sent for six months to communities, libraries, schools, colleges, study clubs, and literary associations, free of cost except for transportation, upon application bearing six signatures.

In addition to the general traveling library system, there have recently been put in circulation six series especially for farmers, each containing 12 to 15 technical books on agriculture, which are sent on application of three farmers who agree to circulate them in their vicinity.

From the general loan collection of about 3,000 books on special subjects, study clubs, teachers, schools, debating societies, and individuals may borrow books free of cost, except for payment of transportation both ways.

Notable progress in library development has been made in North Dakota since the organization of the commission, as shown by the following statistics:

Statistics of libraries.

	July 1, 1908.	July 1, 1910.	July 1, 1911.
Traveling library stations	19	138	246
Traveling libraries	19	117	162
Books in traveling libraries	851	6,158	8,517
Farmers' library stations	.....	7	72
Farmers' libraries	.....	25	95
Books in farmers' libraries	.....	365	1,230
Educational reference books	.....	2,425	2,978
Public libraries in State	27	33	33
Carnegie buildings	6	8	9

The active organization of a legislative reference department was begun in 1908, and the work of collecting data on political, legal, and economic questions has been vigorously continued ever since. The department furnishes information and assistance to members of the legislature, State officials, and citizens; loans debate material, and has published bulletins on permanent State tax commissions and on good roads.

The commission is requesting additional funds from the legislature for the purchase of books. July 1, 1911, 24 stations were asking the immediate loan of traveling libraries, and there were no books in the office to supply the demand.

Members of North Dakota Public Library Commission: O. G. Libby, president, Grand Forks; Max Batt, Agricultural College; Edwin J. Taylor, Bismarck; A. E. Sheets, Lakota; Clara L. Darrow, Fargo. Secretary and director, Mrs. Minnie Clarke Budlong, Bismarck.

OHIO.

Library extension work in this State is in charge of a board of library commissioners, established in 1896, which also supervises the State library and names its librarian. That institution is not only a reference library for State officials and members of the general assembly, but also the free public library of the entire State.

The commission is by law authorized to give advice in relation to the maintenance and administration of public libraries. This authority has been liberally interpreted and substantial assistance has been given to those seeking such aid. Provision is now made also for the employment of a library organizer, who devotes her time largely to field work.

The traveling library is administered as a department of the State library, and the so-called "flexible" system, as distinguished from "fixed collections," has been in use from the beginning. Collections varying in number of volumes are sent to women's clubs, schools, granges, public libraries, independent study clubs, religious organizations, men's clubs, and similar organizations. These are loaned for three months, with privilege of renewal, transportation both ways being paid by the borrowers. The traveling library department also issues small collections of books on agriculture, not exceeding eight volumes each, to individual patrons, and other books are loaned to individuals for a period of four weeks.

The Ohio library organizer reported for the past year in September, 1911, that—

> in addition to meeting special requests for aid, efforts have been made to visit libraries in the State, encourage keeping proper records, to install standard charging systems, to classify libraries needing help, assist in cataloguing, stimulate use of libraries, hold district meetings, develop extension and encourage library training courses, to study conditions in the State institutions, and to issue a series of bulletins. The exchange of periodicals has been furthered by making a list of libraries wishing to exchange duplicates and an outline explaining the method of exchange, and mailing them to libraries interested. Traveling libraries have been in demand, and the question of county libraries is being actively considered. Thirty communities have taken advantage of the provision for township libraries. Sixteen district library meetings have been held and have been most beneficial. Addresses on library extension have also been given at the teachers' institutes.

There are now in Ohio a total of 137 tax-supported libraries, but 13 counties in the State are still without a single institution of the kind.

The general assembly in 1910 enacted a law authorizing the board of library commissioners to establish, in connection with the Ohio State library, a "legislative reference and information department," and appropriated $3,000 for its support. The work of the new department has been inaugurated, and it is planned to make it of general service throughout the State.

The Ohio board of library commissioners consists of J. F. McGrew, Springfield; John McSweeney, Wooster; and Frank N. Sweitzer, Canton. Its secretary is John H. Newman, State librarian.

OREGON.

The Oregon library commission was created by an act of the legislature of 1905 to—

> give advice to all schools, free and other public libraries, and to all communities which may propose to establish them, as to the best means of establishing and maintaining such libraries, the selection of books, cataloguing, and other details of library management. It may also purchase and operate traveling libraries within the State among communities, libraries, schools, colleges, universities, library associations, study clubs, charitable and penal institutions, free of cost, except for transportation, under such conditions and rules as shall protect the interest of the State and best increase the efficiency of the service it is expected to render the public. It may publish such lists and circulars of information as it shall deem necessary, and it may also conduct a summer school of library instruction and a clearing house for periodicals for free gift to local libraries.

By the school library law of 1905, the additional duty was imposed of acting as purchasing agent annually for all school districts in the State, outside of Multnomah County, in which is the city of Portland. The members are prohibited by law from receiving payment for their services.

The main divisions of activity of the commission are traveling library work, school work, reference work, and public libraries.

Its latest report tells what was done during 1909–10 toward collecting books, and how these books have been sent throughout the State by post, freight, express, and team, until they have reached a total circulation during this time of over 45,000 loans for general reading, and 9,000 pamphlets and periodical articles for the study of particular subjects. The total number of loans recorded since the beginning of the commission is 74,490, with probably 223,470 readers for traveling libraries alone. These statistics have significance in so far as any educational work may be measured by figures, proving conclusively that there is a demand for a central lending library in the State. The commission library now contains 12,095 books, 9,574 of which are in traveling libraries and the general loan collection, 1,421 in the model school library, and 1,100 in the reference collection. Very few of these books are shelved in the commission rooms, but they are deposited in the 103 branch libraries, or stations, in the State.

The 9,574 volumes in the general lending collection may be found on the shelves of schoolhouses, grange halls, general stores, and small town libraries in over 100 places in the State; the books in the model school library are being read aloud in district schools in nearly every county; the reference collection upon public questions is in

the hands of debaters in many rural and high schools; the professional books for teachers are in the country schools of six counties. Country schools in every county receive from the commission sheets of holiday material, for use in school entertainments. Many granges secure envelopes of pamphlets and clippings for their educational program work upon public questions, as well as upon agricultural topics, and women's clubs in three counties meet to discuss program topics from commission study collections.

The general loan collection of books owned by the commission has not grown as many libraries have grown, but books upon special subjects have been bought to meet definite needs, or to encourage study of some subject which is of first importance to Oregonians. For instance, since it was thought the standard of efficiency among teachers of country schools would be raised if they might have an opportunity to read and study a few books which are most inspirational and helpful for them, several selected books were bought in quantities and distributed among rural schools, with gratifying results. When the United States Bureau of Education published its 100-volume list entitled "A teacher's professional library" (Bulletin, 1909, No. 8), the commission bought these books, and advertised them through the school journals and the county superintendents.

The total amount of orders sent to the State contractor since the school library law went into effect in 1905 is $76,056.82; the number of volumes distributed is about 135,000. The commission judges that two things are now necessary in order to make the school library law accomplish its purpose, namely, supervision by the commission of school libraries and of school library work through a trained field inspector and facilities for thorough normal school training in the use and care of books and libraries.

The members of the Oregon library commission are F. W. Benson, governor; L. R. Alderman, State superintendent of public instruction; P. L. Campbell, president of University of Oregon; Mary F. Isom, librarian of Portland library; W. B. Ayer, Portland. The secretary is Cornelia Marvin, Salem.

At the session of the legislature for 1911 the following library laws were enacted:

1. Providing that any county containing a population of 50,000 inhabitants, or more, may levy a tax not to exceed 1½ mills for a public library building fund, and the tax may be divided and levied in two successive years. The building shall be erected at the county seat. This act would at present apply only to Multnomah County, in which the city of Portland is located.

2. Amending the county library law by striking out the population limit, which had previously made it apply to Multnomah County

only, and by raising the maintenance tax from one-fifth to one-half of 1 mill. It is not probable that any other county in the State will for some years take advantage of this law, as the counties are large and thinly populated, but Oregon now has an excellent county library law ready for use whenever the conditions make it desirable.

3. Increasing the annual appropriation for the library commission from $6,000 to $9,000.

4. Making the State treasurer custodian of the private funds of the commission, these funds being considerable, as it handles all the school library money of the State.

5. Providing that county courts may appropriate $200 from the general fund of the county for the purpose of establishing farm libraries at various points in the counties, in connection with established libraries, commercial clubs, or other public institutions; the list of books from which selections are made to be approved by the Oregon Agricultural College.

6. Appropriating $175,000 for constructing and furnishing a modern fireproof library and museum building for the University of Oregon; $15,000 was allowed for books, magazines, and binding for the Oregon Agricultural College for the biennial period.

There is a movement to call the referendum upon the last two measures, and they have been included in a list of bills for which a referendum petition is being circulated. As no bill without an emergency clause becomes a law in Oregon until 90 days after the adjournment of the legislature, there is considerable uncertainty about the final inclusion of acts in the statutes.

PENNSYLVANIA.

The Pennsylvania free library commission, established in 1899, has as its work the supervision and encouragement of the free library movement throughout the State, and the maintenance of a system of traveling libraries.

The first-named group of duties includes the initial effort to promote library work in a new center, followed by advice and personal assistance in organization and administration. New libraries are visited often and a special effort is made to maintain close relations during the formative period. All free libraries in the State are visited by a member of the commission staff to give counsel on any subjects affecting their welfare.

The traveling libraries are designed to encourage the establishment of permanent libraries wherever possible, and to provide books for localities which can not support libraries of their own. To this end the service is organized as follows:

1. Collections of 50 books for general reading, designed to provide free libraries for communities in which there is no such institution.

These are loaned for six months upon application of 12 taxpayers and payment of a fee of $1 to cover cost of transportation both ways.

2. Groups on special subjects for reading circles and study clubs, which are invited to send their programs to the commission for the collection of libraries covering the appropriate subjects. The number of volumes varies, but an effort is made to include all books necessary for the proper study of the subjects. These libraries are loaned upon application of the officers of the club, for a fee of $1 to cover transportation, and may be kept until the close of the season's work.

3. Collections are provided for use in the schools throughout the State. These libraries each include 50 volumes, chosen to suit the grade for which they are intended, and designed to arouse interest in school work, as well as to lead the young people to an appreciation of the better class of literature. They are loaned upon application of the officers of the school board for a fee of $1, and may be kept until the close of the school year.

4. Books are loaned to individuals who are interested in some particular line of study but are so situated that they can not secure the books needed. These collections include not more than five works, which may be kept three months. The applicant must be indorsed by a real-estate owner and pay all transportation charges.

The Pennsylvania free library commission is composed of Henry R. Edmunds, chairman, and John Thomson, treasurer, Philadelphia; Thomas L. Montgomery, State librarian, secretary; Harrison W. Craver, Pittsburgh; Henry Belin, jr., Scranton; Horace E. Hayden, Wilkes-Barre.

The new school code of Pennsylvania, passed May, 1911, makes provision for the establishment and maintenance of public-school libraries in school districts having less than 500,000 population. Each such library is to be under the management and supervision of the board of school directors of the district, or of a board of seven library trustees, as the directors may determine. The board of school directors in any school district within the population limit may annually appropriate for the support of any public-school library in its district, out of its annual school taxes, such sums as it may deem proper, not exceeding 1 mill on the dollar of total valuation of taxable property in the district. Provided, that when a library is first established, the board of school directors may provide for the building and establishment of such public library, or may provide for the enlargement of any library, in like manner as any public-school building may be built or enlarged. Instead of establishing or maintaining a separate public-school library, any board of school directors may, by a two-thirds vote, join with, or aid, any individual or association in the maintenance, or the establishment and maintenance, of a free, public, nonsectarian library, under such

written agreement as it may determine. The board of school directors, or the library trustees with the consent of the board of school directors, may circulate part or all of the books and other collections of a public-school library among the several schools, or may establish branch libraries. Two or more school districts may unite in the establishment or maintenance of a joint public-school library. The provisions of the law being retroactive and affecting all libraries previously supported by school boards, all existing organizations ceased on the first Monday of July, 1911, and were replaced by the new order.

RHODE ISLAND.

In this State free public libraries, as well as public schools, are under the general supervision of the State board of education. The State committee on libraries, composed of three members of the board of education, performs the duties assigned in some States to a public-library commission. The committee apportions annual State aid to all free public libraries, and in connection therewith requires thorough reports from librarians. All lists of books purchased with State money must have the approval of the committee, which also promotes the organization of new libraries, gives advice and assistance to librarians, maintains a system of traveling libraries, and issues various publications. The legislature of 1911 increased the annual appropriation for the visitation, examination, and management of free public libraries by the State board of education from one to two thousand dollars.

Rhode Island apportions annually $8,500 for the purchase of books among 57 free public libraries, in addition to an annual appropriation of $1,000 for traveling libraries. Aid is granted annually to each library as follows: Fifty dollars on the first 500 volumes in circulation; $25 for every additional 500 volumes; $200 being the maximum allowance to any one library.

The system of traveling libraries, which was established by legislative enactment in 1907, includes: (1) Traveling libraries circulated by the committee; (2) traveling or branch libraries distributed to schools with State aid by existing libraries; and (3) traveling libraries maintained and circulated with State aid by associations. There are now 30 libraries of the first class, 19 of the second, and 120 of the third, altogether numbering 9,193 volumes, with a circulation for the year 1909–10 of 25,623 loans. More than half of the appropriation for traveling libraries is expended as direct aid to associations maintaining and circulating them.

The members of the Rhode Island committee on libraries are Frank Hill, chairman, Ashaway; Frank E. Thompson, Newport; and Samuel W. K. Allen, East Greenwich. Walter E. Ranger, commissioner of public schools, is secretary.

TENNESSEE.

The Tennessee free library commission was established by the legislature of 1909 and was organized March, 1910, at which time a general secretary was elected to take active charge. Its membership is made up of three persons appointed by the governor, together with the State superintendent of public instruction and the State librarian ex officio.

The act establishing the commission provides that—

> It shall be the duty of the commission hereby created to encourage and promote the establishment throughout the State of free public libraries, school libraries, traveling libraries, and other libraries, and aid in the organization and administration thereof, and in the administration of libraries already established in this State. For this purpose the commission, when opportunity offers, shall give information and advice to all communities in the State that propose establishing such libraries as to the best methods of establishment, organization, and administration; and, in the case of any library already established, shall, whenever requested by the librarian or board of directors or trustees thereof, furnish like assistance, information, and advice to such library. The commission is authorized to purchase and accept gifts of books, periodicals, and traveling libraries and circulate them in towns, villages, and farming and other communities where needed, it being the purpose of this provision to make practicable in small communities, by temporary supplies thereof, such reading and study of good books and periodicals as is not practicable to persons who have not access to libraries.

The legislature of 1911 appropriated the sum of $2,500 a year for two years for the salary of a secretary and State library organizer, stationery, printing, and other legitimate expenses of the commission.

It was reported that during the summer of 1910 the general secretary of the commission attended several State teachers' institutes, and gave lectures and conducted library classes with excellent results. Great interest was taken by the teachers, and the library spirit was notably developed. The plan was to continue and extend the movement so auspiciously inaugurated.

The membership of the free library commission consists of G. H. Baskette, president, Nashville; Mary Hannah Johnson, secretary, Nashville; Mrs. W. D. Beard, treasurer, Memphis; J. W. Brister, State superintendent of public instruction; Mary R. Skeffington, State librarian.

The general education bill of 1909 set aside 25 per cent of the gross revenue of Tennessee for school purposes. One per cent of the fund derived from this appropriation is used to encourage and assist in the establishment and maintenance of libraries for the public schools, as provided below:

> Whenever the patrons and friends of any public school in any county of the State shall raise by private subscription or otherwise, and tender to the county trustee, through the county superintendent of public instruction, the sum of $20 or more for the establishment and maintenance of a library for that school, said county superintendent shall notify the state superintendent of public instruction, and, upon

the certificate of the state superintendent of public instruction, the comptroller of the treasury shall pay to the trustee of said county, out of the fund herein provided, a sum equal to half that raised by private subscription or otherwise, to be added to the library fund of said school; and whenever $10 or more shall be raised by private subscription or otherwise to supplement a library already established under the provisions of this section of this act, said library may in like manner receive from the fund herein provided a sum equal to half the sum so raised.

Provided, That no school shall receive in any one year from this fund more than $20 for the establishment of a new library, or more than $10 to assist in supplementing a library already established.

Since the passage of this act more than 600 schools have availed themselves of the opportunity to secure libraries, but the department of public instruction has not been able to use all the funds available for this purpose on account of lack of interest on the part of many teachers. It is not only ready, but anxious, to distribute this money among the various counties, and since there is on hand an amount sufficient to meet all demands, school-teachers all over the State are urged to inaugurate some movement in their localities to secure a part of the fund.

Through the general education bill of 1909, the State library receives for traveling libraries for county schools one-fifth of the 1 per cent accruing for library purposes from the 25 per cent of the gross receipts of the State. At present 3,600 volumes are in circulation by this system, and new collections, which will soon be available for use, are in preparation. The legislative act places these circulating libraries under the joint direction of the State library and the department of public instruction.

The State library announces a twofold object in sending traveling libraries to the county schools—first, to make of the boys and girls of to-day the reading men and women of to-morrow; second, to reach the patrons through the pupils. The books of the libraries are carried into the homes of the pupils, and are read both by them and by adult members of the family, thus arousing a desire for permanent libraries. For example, the Anderson County News, of November, 1911, says that a library of 50 volumes in the Briceville school was read by over 300 pupils and patrons in less than a month's time.

The scheme by which these libraries are operated is both simple and comprehensive. On application of the county superintendent, the State library will send to each county one or two sets of traveling libraries, containing six libraries to a set and 50 volumes to a library. These libraries are made up of primary, intermediate, grammar, and high-school books, with a few additional volumes on agriculture and related subjects. The county superintendent distributes these libraries through his county schools, the teacher in charge of each school becoming librarian. The State library holds the county superintendent responsible for the circulation of the libraries, and the county superintendent holds his teachers responsible for the circula-

tion of the books after the libraries reach the schools. One set of libraries remains in a county for one school year, then goes to another county, and a new set takes its place. There is no charge for these libraries, the State library furnishing the books, cases, and paying transportation.

The Carnegie Public Library of Nashville systematically circulates a large number of its books, for supplemental and parallel reading, in the white public schools and the night schools in the city. These books, carefully selected by the librarian and a committee of teachers, provide a graded literature of the best character, especially adapted to the kinds and courses of study in the schools. The books are neatly packed in locked boxes made for the purpose, each box containing the volumes designed for a particular school and arranged to suit the requirements of each of the grammar grades. The boxes with the books are sent to the schools at the beginning of the term, and are returned to the library at the end of each quarter to be examined, and are then redistributed among the schools, so that at every distribution each school shall receive a change of titles. It is estimated that each book is read on an average of eight times a year. It is hoped that other communities in the State may be impelled to emulate Nashville in the provision of school libraries.

TEXAS.

The act creating the Texas library and historical commission became effective March 19, 1909. It provides for a commission composed of three members appointed by the governor, and two ex officio members—the professor of history in the University of Texas and the superintendent of public instruction. The present membership comprises Eugene C. Barker, chairman; Mrs. Joseph B. Dibrell, Mrs. Joseph D. Sayers, Walter Tips, and F. M. Bralley. E. W. Winkler, State librarian, is ex officio secretary of the commission.

The duties of the library and historical commission, as prescribed by law, may be summarized as follows: (1) To control and administer the State library; (2) to encourage historical work and research; (3) to collect, classify, and publish the historical archives; (4) to aid those studying the problems to be dealt with by legislation; (5) to aid and encourage libraries; and (6) to conduct library institutes.

This comprehensive statute combines several different forms of State library work under one administrative board. Owing to lack of funds, some of the lines of activity marked out for the commission have not yet been touched. The law presents the specifications of the great and useful work that the commission, when it has the funds, is to develop. An effective beginning has already been made toward the development of a legislative reference department, and in various other directions.

The powers of the Texas Library and Historical Commission in regard to library extension are broad and generous in their intent:

> The commission shall give advice to such persons as contemplate the establishment of public libraries in regard to such matters as the maintenance of public libraries, selection of books, cataloguing, and library management. The commission shall have conducted library institutes and encourage library associations. The State librarian shall ascertain the condition of all public libraries in this State and report the results to the commission.

The appropriation allowed for this branch of the commission's work placed very decided bounds to the extent of its activities. The work has been limited almost entirely to what could be done by correspondence, of which there has been a large amount. With the small funds at its command, the commission has been unable to hold special library meetings, but has, however, had representation on the programs of such bodies as the Texas Library Association and the State Federation of Women's Clubs.

The growth of public-school libraries in Texas during the past decade has been remarkable. An increase in 10 years in the number of these libraries from 450 to 1,978, and an increase in the number of volumes contained in them from 90,335 to 267,679, show a tendency in the right direction. However, in view of the fact that in 1909–10 there were in Texas 949,006 children of school age distributed among 11,668 schools, the extension of library facilities for these pupils may well be continued, and for this purpose encouragement and direction from a central authority would be of advantage.

At the time of the last report of the State librarian, August 31, 1910, there were 30 free public libraries operating in Texas, while 4 others had their buildings complete and were expected to open in a few months. Several public subscription libraries were also in existence. A library building costing $15,000 had been erected at the Southwest Texas State Normal School, and the fine building for the University of Texas library was under construction. Campaigns for free public libraries were in progress in a number of cities.

The history of free public libraries in Texas dates back only 10 or 12 years. Remarkable progress has been made during this brief period by the libraries in the large cities. The success of the public library in the smaller cities has been varied. Where the financial support has been at all adequate, and the administration in competent hands, they have done excellent work, but this support has not always been furnished. If the commission had the means to send out a field organizer, he could be of assistance in cases where favorable sentiment needs to be aroused, and also in new enterprises already under way.

The legislature in extra session, August, 1911, passed an appropriation bill which included $11,478 for maintenance of the commission during 1911–12, and $10,378 for the same purpose during 1912–13,

but through vetoes of various items by the governor these amounts have been reduced to $10,178 and $7,078, respectively.

The University of Texas announces that it is prepared, through its public discussion and information division, to furnish specific aid to the citizens of the State in the discussion of important public questions. This aid the university will attempt to supply, as far as its resources permit, by means of traveling libraries accompanied by specific references to the books and articles contained therein, and by additional references for more extensive reading. It is hoped that such traveling libraries and such lists of books and articles will be of service to members of debating clubs, women's clubs, and labor unions, and to public officials and others.

At the present time the university has available for circulation traveling libraries and lists of books relating to the following topics: Penitentiary reform, liquor problem, municipal ownership of public utilities, city government by commission, compulsory education, and books suitable for use by mothers' clubs.

Upon request these traveling libraries will be loaned free of charge for a period of three weeks, with privilege of renewal, to citizens of Texas who are willing to pay the express charges upon them both ways.

UTAH.

After two years of library promotion conducted by a public-spirited unofficial commission, the Utah Legislature of 1909 established a State library gymnasium commission of five members, to be appointed by the State board of education, and to be under its general supervision. Its purpose was "to increase and improve educational advantages of the State by establishing and maintaining free libraries and gymnasiums." The special feature of the work in Utah is the promotion of the public gymnasium with the library, thus affording facilities for healthful development of both mind and body. At the same session of the legislature, it was made obligatory upon school boards outside of the larger cities to spend for school libraries 15 cents per capita annually for each child of school age.

Upon recommendation of the governor, in the interest of economy, the legislature in 1911 repealed the act establishing the commission and transferred its duties to the State board of education, as follows:

> The State board of education shall also promote the establishment of libraries and gymnasiums throughout the State, and shall have power to appoint a secretary, who shall work under the direction of the State superintendent of public instruction. The salary of the secretary shall be fixed by the State board of education and approved by the State board of examiners. The board shall have the power to call to its assistance expert help to promote libraries and gymnasiums whenever needed. The actual and necessary traveling expenses incurred by such help, and the salary of the secretary, shall be paid from the contingent fund of the State board of education upon the presentation of properly certified and approved vouchers.

At the legislative session of 1911, also, it was enacted that in cities of the third class and incorporated towns, an election to determine the establishment of a free public library or library and gymnasium shall be called upon petition of 10 per cent (instead of 50 per cent, as previously required) of the legal voters. The maximum tax for a free public library was raised to 3 mills from 1 mill; the maximum tax for a free public library and public gymnasium was made 4 mills instead of 2. Such cities and towns may now cooperate with school districts to maintain free public libraries.

Much has been accomplished since the beginning of the library movement in this State. Four years ago there were only three public libraries in Utah; now there are 15 in active operation. Besides this, a dozen more cities at least are reported to be well on the way to the establishment of public libraries.

The school library cause, also, has been greatly advanced. When this movement was inaugurated, very few schools in the State had any collection of books, and almost none had a collection worthy of the name of library. To-day the majority have a good beginning toward an effective school library, and a considerable number of schools have libraries regularly opened to the public.

VERMONT.

Vermont has a board of library commissioners with the following functions and aims:

Functions: To furnish material aid by gifts of books for establishing libraries or for subsidizing small libraries, and by loan of traveling libraries to individuals, clubs, schools, and libraries. To give advice and instruction in all subjects relating to the establishment, maintenance, and administration of libraries, by means of correspondence, by the personal visit of a library expert, by institutes for the free instruction of librarians, by printed book lists and discussions of library problems. To furnish inspiration by public meetings which emphasize the dignity and scope of the work, by meetings of librarians and trustees which promote inter-library exchanges and broader interest, by the Bulletin—a periodical devoted to the library interests of the State.

Aims: To supply Vermonters with material for wholesome and uplifting diversion; to give opportunity of continuous public education; to furnish means of a broader culture.

The general assembly, at its 1908 session, adopted legislation conferring larger powers and imposing new duties upon the board, and at the same time granted increased appropriations. The most important amendment made to the library law was that which authorized the board to assist those libraries in the smaller towns that render useful assistance to the country schools and districts remote from the

library. For this purpose an annual appropriation of $1,000 was placed at the disposal of the board. This enabled it during the year from December 1, 1908, to December 1, 1909, to assist 38 towns with gifts of carefully selected collections of books, costing from $20 to $35 dollars each. In arranging this work the board required a formal application and an assurance that work would be done beyond the usual routine; and at the end of the year a report was requested from each town that received such assistance in order that the board might know the value of this work and plan its future policy. Of the 38 towns, 21 have done substantial work in the small country schools, and several have maintained branch or traveling libraries in their remote sections.

The year 1910 brought 65 applications for annual aid, of which 22 were from towns which did not apply the first year. Owing to the limited appropriation, the board was able to grant assistance to only 45 of the number.

The eighth biennial report of the commission for 1909–10 shows substantial progress during this period in the organization of libraries and the erection of buildings. Through the enterprise of public-spirited associations and private benevolence Vermont now has 72 library buildings as memorials of the generosity of the donors, many of whom have left the State. During the term covered by the report large gifts or bequests for library purposes have been received by the towns of Bristol, Danville, Lunenburg, Newbury, Pittsford, Reading, St. Johnsbury, Strafford, Wilmington, and Windsor.

New free public libraries have recently been established by vote of their town meetings in eight towns. These make 126 free public libraries, owned and controlled by towns, receiving State aid, and a total of 183 libraries in the State.

Since 1908 the commission, sometimes in conjunction with the State Library Association, has held quarterly meetings at various towns in the State. To these not only librarians but educators and all interested in libraries and schools have been invited, and the interest and attendance have been very gratifying. The topics considered have been inspirational rather than technical, and cooperation with schools has been a central theme. Since school districts have been long abolished in Vermont and very few schools have libraries, the town library is the natural source of supply for the schools. Emphasis has also been placed on the establishment of branch libraries in towns so situated as to need them, and the circulation of traveling libraries in schools by the local library. An annual institute of instruction was held at the University of Vermont in July, 1908, at Middlebury College in July, 1909, and at the academy in St. Johnsbury in June, 1910, all of which were profitable and well attended.

The session of a week was occupied by lessons in book mending and the principles of cataloguing and library methods. The course was entirely free. A section in the new law provides that the necessary expenses of a librarian in attendance at such school may be paid by the town, city, or incorporated village in which such librarian is employed. No institute was held in 1911, but it is officially announced that it has not been given up, but is undergoing a process of adaptation. The plan was to hold this year, instead of one central school, one or more smaller meetings of instruction less formal than an institute. In this way it was hoped to reach and teach those librarians who have never been able to come to the institute, and to offer equally good but more concrete instruction.

Regarding traveling libraries, the report of the commission for 1909–10 says:

> We are now completing 10 years' experience with traveling libraries and report continued and increasing demand for them in all departments. The use of the general libraries has nearly doubled. In some cases the stations have formed permanent libraries and so have dropped from the list of borrowers. Other stations have dropped out for other reasons, and new communities have been added to the list. A new growth has been in the direction of libraries on special subjects and school libraries. These have been limited only by the means at our command to supply them. We have feared to advertise school libraries very much this past year because we have not had enough libraries to meet the increasing demand. During the past two years we have added to our equipment 8 general libraries, 14 school libraries, 16 studying club collections, and various sets of pictures.

It is commonly found that when books are sent for the use of the school children the parents also become interested, and the result is an aid toward raising the people in general to a higher plane.

The libraries average from 40 to 50 volumes each. The superintendent of the traveling library department, or the secretary of the commission, will upon request furnish an application blank, which is to be filled out and signed by three citizens, stating the name of the person who is to act as librarian and have charge of the correspondence regarding the library. It also contains an agreement to return the library within six months from its reception, to pay transportation charges, and to make good any losses beyond reasonable wear. While the law requires the signatures of but three citizens, it is always desirable, in the view of the commission, that a larger number should be behind the movement.

With each library is furnished a sufficient number of annotated lists of the books contained therein for all families in the community. These are designed to arouse interest and aid in making a selection of books desired. The expense of transportation of the books varies with the size of the library and the distance it must go, from 50 cents to $1.50. The express companies make a reduction of half the regular rate on the return.

The library commissioners are March M. Wilson, chairman, Randolph; Mrs. C. M. Winslow, Brandon; Edward M. Goddard, Montpelier; Fanny B. Fletcher, Proctorsville; Caroline H. Clement, Rutland. Miss R. W. Wright, Montpelier, is secretary of the board.

The Vermont Legislature, at its session in 1911, established in the State library a legislative reference bureau, and appropriated $1,000 annually for its maintenance.

VIRGINIA.

The Virginia State library performs many of the functions of a library commission, in that it has charge of the system of traveling libraries and endeavors in every way possible to advance library interests in the State. It also renders effective service in its legislative reference department.

In 1906 the general assembly of the State appropriated $7,500 for the organization of a department of traveling libraries, and at its next session in 1908 made for the support of this department an appropriation of $1,800, which was renewed in 1910. With these limited means the service has been maintained and extended as far as possible.

The number of traveling library collections in November, 1910, was 211—81 general collections for communities, 125 school collections, and 5 special collections. The demand from schools and communities for these libraries has long since exceeded the supply. Many testimonials received from various parts of the Commonwealth, and the commendation of the State superintendent of public instruction, show that the service is valuable and is appreciated. During 1909–10 70 new library stations were established, and the total circulation of the books in the traveling library system was 29,129, while the total number of borrowers was 6,450. The benefits of the system are increasing each year, and it has grown to be a most important factor in the educational work of the State.

The libraries consist of fixed collections, numbering from 25 to 50 carefully selected volumes, and are sent out free of charge to a public school, a community, a study club, a literary society, or, in fact, to any organization in the State desiring books. At present the libraries are grouped as follows: School libraries for schools, general libraries for communities, and special libraries for aid along particular lines of study, used by study clubs, literary societies, etc. Each library is allowed to remain at a traveling library station for six months, if it be a general or special collection, and in the case of a school collection for an entire school session, generally eight or nine months. At the end of the allotted time the library is returned to the State library at Richmond and another is sent in exchange.

The traveling libraries are intended, primarily, to meet the needs of the rural population; they are also intended for cities and towns which have no public library, and for schools without libraries or with libraries requiring supplementation.

In the case of the general and special libraries, application blanks must be signed by the officers of a local library association, formed for the purpose, and by 10 taxpayers, while for school libraries only the taxpayers' certificate is required, including the signature of the division superintendent and the principal of the school. In all cases a person designated to act as librarian agrees to care for the books while in his or her custody, make any reports required concerning their use, and return them in good order to the State library at Richmond, when another "fixed group" will be sent. Each community or school consequently receives a different set of books each time, and eventually may have use of all books in the system—over 10,000 choice volumes. As a contribution to public education, the railroads and steamships operating in Virginia transport the books free of charge to and from Richmond.

At present a movement for public library extension is in progress, under the auspices of the Virginia Library Association, which was organized in 1908. The plan is to enlarge the powers of the existing State library board by adding to its present functions the work of attempting, through a field agent as organizer, to create libraries all over the State, so that every town may have its own free public library. This proposal will be submitted to the legislature at its next session, in 1912.

At the third annual meeting of the Library Association of Virginia, held in connection with the Virginia educational conference in Richmond on November 25, 1910, Ex-Gov. Andrew Jackson Montague presided. State Superintendent of Public Instruction J. D. Eggleston, jr., after praising the good work of the traveling libraries, and showing their importance as precursors of permanent book collections, expressed the desire that a library organizer be secured at the next meeting of the legislature, and was supported by other speakers. The meeting was well attended, and was marked by interest and enthusiasm.

The members of the Virginia State library board are Armistead C. Gordon, chairman, Staunton; John W. Fishburne, Charlottesville; Theodore S. Garnett, Norfolk; S. S. P. Patteson, Richmond; Edmund Pendleton, Richmond. Executive staff: H. R. McIlwaine, State librarian; George Carrington Moseley, chief of traveling library department.

WASHINGTON.

The State library commission of Washington, consisting of the governor, the judges of the supreme court, and the attorney general, was created by the law of 1903 to have charge of the State library and all its departments. The State librarian is secretary ex officio of the commission. In addition there is an advisory board which consists of the superintendent of public instruction and four persons appointed by the governor, one of whom must be a person recommended by the Washington State Historical Society and another a person recommended by the State Federation of Women's Clubs. The advisory board is directed by the law to give particular attention to building up a State historical department and a system of traveling libraries, and to give advice and counsel to all free libraries in the State regarding methods of establishment and administration. The present members of the State library advisory board are Henry B. Dewey, superintendent of public instruction; Mrs. Kate Turner Holmes, Seattle, representing Washington State Federation of Women's Clubs; William E. Henry, librarian State University; Franklin F. Hopper, librarian Tacoma public library, representing Washington Historical Society; and Senator John D. Bassett, president of Ritzville public library board.

In his report for 1909–10 the State librarian notes a large increase of calls for books from remote parts of the State and from persons evidently engaged in serious research work. No effort is spared to encourage this phase of the work. Much more could be done if funds would permit the purchase of fitting sets of books along the lines of study of annual club programs and in sufficient numbers to supply several clubs pursuing the same lines of work. It is found that several clubs or groups of persons commonly want the same books, and want them for a length of time that precludes the possibility of a division among them of the stock available.

During 1909–10 no less than 22 libraries were established, including a few reported as high-school libraries. No purely school libraries, however, are included in that number, but only those which are such until the community can assume and maintain them as public libraries, the public having access to them in the meantime. This increase is more than 100 per cent over the rate of the preceding biennium. Many of these, however, still need assistance from the State—financial assistance if the funds were in hand, but at least technical assistance in furthering their campaign for support locally and for direction in the administrative problems incident to organization. Besides these libraries already established and needing assistance there are many places which have appealed to the State library for help in creating and directing a public sentiment in favor of establishing a local public library. There should, therefore, be a

specialist in the field as an organizer, an adviser, an inspector of public libraries, and the legislature will be asked to provide for this want.

A beginning has been made toward the organization of a legislative reference department, but this branch of the work has not yet been sufficiently developed to yield the best results.

The statutes of Washington give permission to the county commissioners of each county to provide by taxation, with certain limitations, a circulating library for the use of the schools of that county. The necessity for library facilities in the operation of the schools is so well established that a movement is under way to make this law compulsory, as in California and some other States.

The number of libraries in Washington which occupy their own buildings instead of rented or temporary quarters is indicative of the substantial nature of the library movement in the State, and in most cases the plans exhibit the latest devices and arrangements for effective administration. There are in the State 24 Carnegie buildings, with an aggregate valuation of $747,000.

The traveling library of Washington was begun by the State Federation of Women's Clubs and turned over to the State library commission on its establishment in 1901. In 1903, when the commission was reorganized, the traveling libraries were made a department of the State library. By the law of 1907 the traveling library work is placed in the hands of a secretary of the traveling library, appointed by the commission, but independent of the State library.

The libraries are sent to any community upon the application of three responsible persons and upon the payment of transportation charges. A special effort has been made to reach study clubs, which are urged to send in programs. Lists of books in the State library bearing on the subjects are sent to the clubs to make their selection. The only expense to the clubs is the transportation fee, and any number of books desired are supplied.

In 1907–8 the work of the traveling library was extended until there were 150 libraries in the field. Owing to lack of money and of assistance, no effort has been made during 1909–10 to extend the work.

The following statistics are taken from the report of the secretary of the traveling library for 1909–10: Reported registration readers in four years, 23,709; in reality, over 70,000. Reported circulation books in four years, 85,174; in reality, over 255,000. Illustrated magazines and papers given away in four years, approximately 18,790. Applications on file in four years, 403. Books in the library, in round numbers, 8,000. This department has helped to establish, in some instances, and has supplied to all, books for 75 public libraries, reading rooms, high-school libraries, Y. M. C. A. and W. C. T. U. libraries, and grange halls. Women's clubs, boys' clubs, and commercial clubs are also patrons.

WISCONSIN.

The free library commission carries on its work of library extension in Wisconsin through (1) the instructional department, which includes the maintenance of the Wisconsin library school, as well as a summer school and various library institutes; (2) the department of library extension and visitation; (3) the traveling library department; and (4) the legislative reference department, which includes a bill-drafting department as well as a reference library.

Since libraries are now found in nearly all Wisconsin communities of resources sufficient to maintain them, the recent work of the commission has been directed toward strengthening and vitalizing institutions already existing, rather than toward founding new libraries. The department of library extension and visitation aims to visit every free library of the State at least once each year to render counsel and cooperation, and devotes an average of two days to each visit. If for any reason a library is in need of special help, more than one annual visit is made. A report regarding each visit is prepared and placed on file. In performing this field work the commission has always placed the needs of the libraries in the smaller communities first, believing that the libraries in the larger cities are better able to care for themselves. During the year ending June 30, 1909, the members of the staff made 162 visits to 108 libraries. During the year ending June 30, 1910, they made 217 visits to 156 libraries. Of the 182 libraries in the regular visiting list, only 26 were not visited during the last fiscal year, and of these 17 are more properly traveling stations, so that only 9 libraries proper remained unvisited during the year. In addition, many visits were made to traveling library stations and to some of the smaller libraries by the chief of the traveling library department, who has also frequently appeared at farmers' institutes, club meetings, and other gatherings, to which she goes to advance general library interests as well as those of the traveling library. Her work in aid of new library building projects has been of special value. Furthermore, the secretary made numerous calls upon various librarians and library boards for various special purposes, while he and members of the staff have also appeared in many educational meetings and library meetings throughout the State.

From the library school, during February and March of each year, students are sent to do apprentice work in various libraries of the State. During the year ending June 30, 1909, 19 students gave their services without compensation in 15 different libraries, and during the ensuing year 26 students gave services in 23 libraries. Trained assistance has thus been rendered to institutions needing it in various parts of the State.

Among the phases of library work upon which the commission is now laying special emphasis is that of the cooperation of the library

with the schools, both because of its own keen appreciation of the value of this work and because it is the policy of the State, as evidenced by the statutes. The State superintendent of public instruction is a member of the State library commission; the superintendent of schools of every city is a member ex officio of the library board. Under the law requiring the expenditure of certain sums for the purpose, there is a school library in nearly every schoolhouse; the law also requires those applying for second-grade teachers' certificates to have a knowledge of the cataloguing of libraries. The commission is therefore everywhere strongly urging the closest working relationship between the librarian and the teacher. In many cities classes are sent in school hours to the public library, there to learn the use of books and the resources of the library. It is found necessary in other places for the librarian to visit the schools in order to reach the pupils, although experience indicates that the ideal method is for the classes to go to the library. In all of the larger places, also, groups of books, including such as are particularly useful to the pupils, are sent to the schoolroom to be left for a considerable period of time and circulated under the direction of the teacher. Members of the commission staff have prepared outlines for the work with the schools and for instruction to be given to the public-school pupils with reference to the resources of the library. The staff have also visited a number of educational meetings to urge upon teachers, by addresses and by personal suggestion, the value from an educational standpoint of cooperation between the teacher and librarian.

Besides the room used for general library purposes, most libraries of Wisconsin have an auditorium and other smaller clubrooms. The librarians of the State are assisting in special reference work for debating clubs, study clubs, and commercial clubs, and are taking an active interest in civic improvement leagues. They arrange exhibitions and receptions in order to bring the people of the community to the library building and make its possibilities known to all. The commission has taken the position that a men's reading room so conducted as to be a smoking room and a clubroom as well meets a definite need. Many cities have instituted such reading rooms, and while they are not patronized as much as they should be, they are to some extent meeting this demand.

The plans of the commission for next year include assistance by a field visitor in organizing boys' clubs, civic leagues, etc., the work to be carried on usually through the local library, with direction and encouragement from the commission. The libraries of the State cooperate in every way possible with the local and State boards of health, and have proved to be efficient distributing points for the literature issued by the antituberculosis association. The commission has recently inaugurated special cooperation with the exten-

sion department of the University of Wisconsin by loaning study groups to the extension department, which in turn places these at the disposal of its students. The bibliographical and other publications of the commission have been of great general service.

Traveling libraries circulated by the Wisconsin free library commission are composed of the best popular books of fiction, history, travel, biography, sociology, literature, useful arts, fine arts, and science, regularly including a number of children's books. There are three sizes of the English collections, those of 30, 55, and 100 volumes, respectively. The first size is sent to the isolated hamlets in the northern part of the State, the second to the regular stations of average size. These libraries are kept for six months and are then returned to the commission in exchange for another box, the only expense incurred in securing them being the payment of the freight on the box upon receipt and return. The 100-volume libraries, which are kept for six months, are rented for $12 a year to the smaller public libraries having inadequate book funds.

German, Yiddish, Danish, Norwegian, and Polish traveling libraries, containing 35 volumes each, are loaned to public libraries for six months at a rental fee of $7 a year. Small groups of Bohemian, Danish, French, German, Norwegian, Polish, and Swedish books are often sent with the English traveling libraries to settlements of foreigners.

The commission also has special collections of young folks' books, which it loans without charge to small public libraries, and also furnishes study libraries to women's clubs and other organizations upon payment of transportation charges.

To secure a traveling library for a farming community or village, a library association which shall include at least ten citizens should first be organized and a librarian chosen. Application must be made on a blank furnished by the commission. The books of the traveling library must be loaned without charge to any person in the community who will agree to handle them carefully and to pay all fines and damages.

As an evidence of the popularity of the libraries as a whole, it may be noted that the circulation of all the traveling libraries, exclusive of study club libraries—these being mainly used for reference purposes—was 216,439 for 1909–10, as against 193,319 for the two preceding years. The growth in the number of stations for the past seven years has been as follows: 1904, 190; 1906, 279; 1908, 388; 1909, 465; 1910, 618. During 1909–10 the sum of $2,510 was expended for 40 new traveling libraries for rural communities. A larger appropriation could well be employed in meeting the demand for extension of this work.

Besides the State traveling libraries there are also 14 county systems of traveling libraries in Wisconsin, the organization of which is permitted under special act of the legislature. These systems have a total of 334 libraries and 274 active stations.

The members of the Wisconsin free library commission are W. H. Hatton, chairman; Matthew S. Dudgeon, secretary; Charles P. Cary, State superintendent of public schools, Reuben G. Thwaites, secretary State Historical Society; Charles R. Van Hise, president University of Wisconsin; Mrs. C. S. Morris.

SEABOARD AIR LINE FREE TRAVELING LIBRARY SYSTEM.

For more than a decade past a system of free traveling libraries has been maintained under the auspices of the Seaboard Air Line Railway, along its lines extending through six Southern States. The late E. St. John, vice president and general manager of the road, was the originator of the system, and Andrew Carnegie has contributed to its support. Mrs. Eugene B. Heard, of "Rose Hill," Middleton, Ga., is the general superintendent.

This system of free traveling libraries was the first established in the South, and has been a potent factor in bringing about library legislation in the six Southern States coming under its influence. Hundreds of small towns and hundreds of schools have established permanent libraries due to the interest created by the use of the community and school libraries of the Seaboard Air Line free traveling library system. The work has a place all its own as one of the important educational movements for the rural South.

From the first, Mr. St. John and Mrs. Heard laid special stress upon school betterment, and required that each community undertake some work of internal improvement, as guarantee that they deserve the use of a library.

Many letters from principals, pupils, and parents, to the following purport, are on file at Rose Hill: "We are putting glass in the schoolhouse windows ourselves; we are cleaning the yard of the schoolhouse; we have collected money to paint the schoolhouse." Accompanying this report of improved conditions is always the request, "Will you not now send us a school library? We will take good care of the books and not soil them more than we can help." In the year 1909, 50,000 children had the advantage of the Seaboard libraries, and the number is constantly increasing.

In addition to the 150 school libraries now in circulation along the Seaboard Air Line, there are some 35 "community libraries," which are the result of Mrs. Heard's personal visits to the dreary flag stations, to the out-of-the-way places where the families of employees were shut off almost entirely from intercourse with the outer world.

One of the most important features of the work is that with magazines and periodicals, which are shipped to the various stations in sacks twice a month, and come as gifts fresh from the publishers.

In a single year, 1909, 17,000 magazines and periodicals were sent to the families of section foremen, while 5,000 copies were sent to the negro settlements. Numbers of reading tables for these publications have been established in rural communities, and their use not only creates a taste for reading but paves the way to a demand for the libraries.

ADDENDA.

NOTES RELATING TO LIBRARIES.

Three leading libraries.—The number of volumes and pamphlets contained in the three largest libraries in the United States was officially reported as follows on the dates named: Library of Congress, 1,891,729 volumes and pamphlets, June 30, 1911; New York Public Library, 1,110,632 volumes and pamphlets in main collection, 809,350 in branches, December 31, 1910; Boston Public Library, 987,268 volumes and pamphlets, January 31, 1911.

New York Public Library building.—The magnificent new building of the New York Public Library was formally dedicated on May 23, 1911, President Taft, Gov. Dix, and Mayor Gaynor participating in the exercises. On the following morning the library was opened for business. The edifice, designed in the modern Renaissance style of architecture and constructed of white marble throughout, has cost more than $10,000,000, and was over 12 years in building. Its endowment and collections were provided by an amalgamation of three private foundations—the Astor Library, the Lenox Library, and the Tilden Foundation—but the city donated the land and paid the cost of the building. This great library has accommodations for about 3,000,000 volumes and over 1,700 readers. One of the most interesting features of this institution is the cooperative work accomplished in connection with the public-school system of New York City.

Other notable buildings.—It is expected that the new building of the St. Louis Public Library, now under construction, will be ready for occupancy in 1912. A new Carnegie library building for the University of Tennessee, with a capacity of 100,000 volumes, was dedicated in May, 1911, and new library buildings for the University of Chicago and the University of Texas have been under way during the past year. Plans for a new library building at Harvard University also, to cost $2,000,000 and with shelving room for 2,400,000 volumes, have recently been drawn by direction of the committee of the board of overseers. Progress during the past year on the building for the Connecticut State Library is reported; and new educational buildings, to include accommodations for the respective State libraries, are under construction in New York and contemplated for Illinois and Indiana.

Library day.—In West Virginia, the establishment of school libraries is advancing, under the supervision of the State department of education, and the pupils' interest in books and reading is fostered by the observance of an annual Library day in the public schools.

CHAPTER VI.

CURRENT TOPICS.

By Henry R. Evans,

Editorial Division, Bureau of Education.

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This chapter continues the record of current events practically on the lines followed in the three previous reports of this office, but with modifications rendered necessary by changes in the arrangement and subject matter of the remaining portions of the report; reference is here made, in particular, to the more extended treatment of certain departments of education in the United States which have been left for several years entirely to the statistical presentations of the second volume of the report.

As regards educational boards and commissions, accounts are given in this chapter of those only which are exercising a predominant influence upon the general movement of education, or which, in their annual meetings for the present year, made some distinctive contribution to the discussion of the specialties to which they severally pertain.

I. EDUCATIONAL BOARDS AND COMMISSIONS.

GENERAL EDUCATION BOARD.

The General Education Board has three main lines of endeavor, namely: (1) The promotion of practical farming in the Southern States; (2) the development of a system of public high schools in the Southern States; and (3) the promotion of higher education throughout the United States.

The object of the board is not to undertake independent educational work, but to secure results through established institutions and agencies. The annual report of this office for the year 1910 contains a complete statement of the policy of the General Education Board, prepared by the assistant secretary of the board, Mr. E. C. Sage.

The following is a summary of the financial report of the board, giving a general view of the principal, income, and expenditures of the different funds under the jurisdiction of the board for the year ending June 30, 1911:

(1) *The Rockefeller fund.*—Principal, $30,918,063.80; reserve, $1,328,313.49; total, $32,246,377.29; total net income, $5,697,851.52.

Payments made on account appropriations.

Agnes Scott College	$46,653.65
Bryn Mawr College	250,000.00
College of St. Thomas	37,666.67
Davidson College	35,876.24
Florida Baptist Academy	2,000.00
Furman University	25,000.00
Hampton Normal and Agricultural Institute	10,000.00
Harvard University	14,750.00
Howard University	9,760.00
Johns Hopkins University	95,365.00
Kowaliga Academic and Industrial Institute	5,000.00
Knox College	9,595.04
Macalester College	8,592.41
Marietta College	44,581.46
Maryville College	1,999.31
Millsaps College	10,000.00
Mississippi College	5,353.50
Ohio Wesleyan University	54,000.00
Paine College	5,000.00
Richmond College	12,857.14
Selma University	5,000.00
Southern Education Board	15,000.00
Swarthmore College	40,624.12
Spelman Seminary	15,000.00
Tuskegee Normal and Industrial Institute	10,000.00
Union College	2,900.00
Union University	991.45
University of Vermont	100,000.00
University of Wooster	127,131.37
Vanderbilt University	150,000.00
Wabash College	7,620.75
Wake Forest College	14,428.11
Walker Baptist Institute	2,500.00
Washburn College	17,526.44
Washington University	45,002.09
Waters Normal Institute	2,000.00
Western College for Women	12,489.75

Wofford College	$8,125.00
Western Reserve University	19,872.89
William Jewell College	35,177.56
Yale University	12,180.86
Lafayette College—interest on unpaid installment of pledge	257.72
Total	1,307,878.86

Payments made on account appropriations for farmers' cooperative demonstration work.

Administration	$8,260.92
Florida	5,773.90
Georgia	31,692.89
North Carolina	25,676.62
South Carolina	21,503.53
Virginia	19,039.39
Girls' canning and poultry clubs	1,122.23
Dr. Knapp's secretary	182.14
Total	113,251.62

Payments made on account appropriations for salaries and expenses professors of secondary education.

University of Alabama	$3,000.00
University of Arkansas	3,000.00
University of Florida	1,500.00
University of Georgia	1,700.00
University of Kentucky	1,500.00
University of Mississippi	3,000.00
University of North Carolina	3,000.00
University of South Carolina	3,000.00
University of Tennessee	1,659.79
University of Virginia	3,000.00
West Virginia University	2,500.00
State Department of Education of Louisiana	3,000.00
Total	29,859.79

The remainder of the income is accounted for as follows: Expenses, $54,139.44; investments, $3,278,545.34; income receivable, $204,844.35; cash on deposit, $729,332.12.

(2) *John D. Rockefeller special fund* (subject to order of Mr. Rockefeller).—Income account: Balance July 1, 1910, $472,374.72; income for year, $561,591.42; total, $1,033,966.14. Expenses, $2,796.23; gifts to University of Chicago, $112,600; gift to General Education Board, $200,000. Balance: Investments, $444,598.65; income receivable, $97,855; cash on deposit, $176,116.26. Principal account: Original gift, $21,335,784.20; balance of original gift, $1,524,046.10.

SPECIAL FUND.

Principal account, June 30, 1911.

Dr.

Original gift		$21,335,784.20
Gift of Mar. 2, 1908, to University of Chicago	$103,689.92	
Gift of Mar. 12, 1908, to University of Chicago	1,679,860.00	
Gift of Aug. 30, 1909, to University of Chicago	929,093.33	
Gift of Jan. 1, 1911, to University of Chicago	9,912,540.74	
Gift of Mar. 12, 1908, to Rockefeller Institute for Medical Research	2,620,610.00	
Gift of June 30, 1910, to Rockefeller Institute for Medical Research	3,641,236.48	
Gift of June 7, 1911, to Rockefeller Institute for Medical Research	924,707.63	
		19,811,738.10
Balance of original gift		1,524,046.10
Balance profit and loss account July 1, 1910	28,881.17	
Profits on securities sold and redeemed during year	15,214.27	
		44,095.44
Balance, June 30, 1911		1,568,141.54

Cr.

Securities as shown in accompanying schedule	1,468,075.15	
Cash balance	100,066.39	
		1,568,141.54

(3) *Rockefeller Institute for Medical Research.*—Income account, 1910: Cash balance original fund June 30, 1910, $21,460; cash balance gift of June 30, 1910, $21,085.24; income received during year, $79,908.50; total, $122,453.74. All securities and funds in charge of the general board, belonging to the institute, were transferred during the year to the custody of its board of trustees.

(4) *Anna T. Jeanes fund.*—Income account: Balance July 1, 1910, $4,504.70; income received during year, $9,206.81; total, $13,711.51. Expended, $8,589.25. Balance June 30, 1911, $5,122.26. Principal account: Amount received from Miss Jeanes, $200,000; investments, $199,522.51; balance on deposit, $477.49; total, $200,000.

CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING.

The fifth annual report of the Carnegie Foundation, covering the administration of the trust for the year beginning October 1, 1909, and terminating September 30, 1910, comprises two parts: Part I, relating to the current business of the year; Part II, discussing the relation of the college and the secondary school.

According to the report the trustees had in hand at the end of the year funds amounting to $11,114,056.86, consisting of the original gift of $10,000,000 par value of 5 per cent bonds and $1,000,000 accumulated surplus. The total income for the year aggregated

$543,881.20. Sixty-four retiring allowances were granted during the year, of which 46 were in accepted institutions and 18 in institutions not on the accepted list. During the year 23 pensioners died. Of those admitted to the benefits of the foundation, 39 were professors and 7 were widows of professors in accepted institutions; 13 were professors and 5 widows of professors in institutions not accepted. Thirty-six of the number were retired on the basis of age and 3 on the basis of disability. The general average of retiring allowances for the year was $1,898.85. The total number of beneficiaries September 30, 1910, was 346, and the total grant in force at that date was $521,070. Four institutions have been admitted to the accepted list of the foundation during the year, namely, University of California, Indiana University, and Purdue University, "as component parts of a single State university," and Wesleyan University.

The president of the foundation, Dr. Henry S. Pritchett, in the first part of the report, follows up the bulletin on medical education, by Mr. Abraham Flexner, by a paper on "The college and university in relation to medical education." He calls attention to the responsibility incurred by any college or university which undertakes medical education. These institutions, he says, have "no longer any excuse for offering the routine medical education current during the past 20 years, and it is no humiliation for any college to abandon part of the work which it has hitherto carried on when changed conditions render it impossible to continue that work honestly within the financial limitations by which the college is bounded. The honest college should either offer a medical education consistent with the standards of our day or else should retire frankly from the field."

The relations of colleges and secondary schools are extensively treated in the second part of the report.

The Carnegie Foundation for the Advancement of Teaching is also in charge of the system of exchange of American teachers between Prussia and the United States, which is operated under the same arrangement as in previous years. For the academic year 1910–11 eight American teachers were assigned to Prussian schools and five Prussian teachers were assigned to schools in this country.

JOHN F. SLATER FUND.

At the forty-fourth meeting of the trustees of the fund, held in New York City, April 29, 1910, the finance committee recommended that $80,000 be designated for appropriations and expenses for the fiscal year 1910–11. The educational committee was empowered to make appropriations not exceeding the amount available. The

report of the educational committee on plan of cooperation with the trustees of the Anna T. Jeanes Fund was submitted and approved. Bishop William Lawrence, of Boston, Mass., was elected a member of the board and Dr. James H. Dillard was elected general agent.

At the forty-fifth meeting of the trustees, held in Washington, D. C., December 13, 1910, the educational committee reported that appropriations amounting to $68,400 had been made to 47 schools and colleges for the colored race in the Southern States. Supplementary appropriations amounting to $800 were also made. A committee was appointed to act with a similar committee of the Anna T. Jeanes Fund in carrying out the plans for cooperation between the two boards. Dr. Wallace Buttrick resigned as a member of the board, and Dr. James H. Dillard, of New Orleans, and Hon. Charles E. Hughes, of Washington, D. C., were elected members.

The trustees of the fund for 1910 were: William A. Slater, president; Richard H. Williams, vice president; John A. Stewart, Alexander E. Orr, Cleveland H. Dodge, Seth Low, David F. Houston, Wickliffe Rose, Walter H. Page, William Lawrence, James H. Dillard, Charles E. Hughes.

Dr. James H. Dillard, New Orleans, is the general agent and secretary of the board, and the field agents are B. C. Caldwell, New Orleans, and W. T. B. Williams, Hampton Institute, Va.

PEABODY EDUCATION FUND AND THE SOUTHERN EDUCATION BOARD.

During the current year the Peabody Education Fund and the funds of the Southern Education Board have been administered in cooperation with State and county authorities in building up State systems of rural schools. Contributions have been made to this work in Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Texas, Arkansas, Tennessee, Kentucky, and West Virginia.

The funds have contributed in the main to the maintenance of four lines of activity:

1. The maintenance of a State supervisor of rural schools in each of 11 States. This supervisor is appointed in each case by the State board of education or proper State authorities, and is thus made a State official with all the powers and responsibilities belonging to such position. He does his work under the general supervision of the State department of education, and devotes his whole time to the building up of the rural schools of his State.

The main work of these men is directed toward the following ends: More adequate supervision; more adequate funds by increased local taxation; the improvement of rural schoolhouses; the adoption of suitable courses of study; the consolidation of small schools into

strong centralized graded schools. They are making in detail an educational survey of the several States by counties and exhibiting the educational conditions as they are. This record of facts is to serve as the starting point for constructive effort to place the rural schools on a sound financial basis and to bring them under effective supervision.

2. As an experiment, contributions have been made this year toward the maintenance of a small number of county supervisors of teaching in country schools. This county supervisor devotes her entire time to the improvement of teaching in rural schools. She is to show them by demonstration. The work is under the general supervision of the county superintendent of schools and the State supervisor of rural schools.

3. Contributions are made toward the maintenance in each State of a State supervisor of school-improvement leagues. These are associations of citizens organized about the school as a center. Their primary purpose is to improve the schoolhouse and grounds, but this frequently leads to a campaign for local taxation and to a larger community effort for civic improvement.

4. Contributions are made from time to time toward the support of educational campaigns. This is done when it becomes necessary to go before the people of a community, a county, or a State in the interest of some definite educational end.

These activities are reported quarterly to the State departments of education, and through these departments to the office of the two funds at Washington. Here these reports are manifolded, bound together, and a copy sent to the workers in each State. In like manner any significant development in one State is reported at once to all the other States. The office of the funds is serving as a center for collecting and distributing information bearing directly upon the work in which these State supervisors are engaged. The State supervisors of rural schools have been called together twice during the year in special conference, and a group of State superintendents and State supervisors made a tour through the Middle West for the purpose of studying the consolidated rural schools in counties that have achieved the best results. A report of this study tour is now in press and will be supplied to each of the workers in these States.

The chairman of the Southern Education Board is Mr. Robert C. Ogden, of New York City, and the executive secretary Dr. Wickliffe Rose, Southern Building, Washington, D. C. Dr. Rose is also general agent of the Peabody Fund.

STATE EDUCATIONAL COMMISSIONS.

WISCONSIN COMMISSION ON INDUSTRIAL AND AGRICULTURAL EXTENSION.

The commission which was appointed by the Legislature of the State of Wisconsin in the year 1909 to investigate the subject of industrial and agricultural instruction and formulate plans upon which to base legislative action submitted its report to the governor on January 10, 1911.

The commission urgently recommends continuation schools, with compulsory attendance of children from 14 to 16 years of age already engaged in industry, supplemented by trade and evening schools. It urges the limitation of children's labor to eight hours, including all time occupied in vocational schools, and advises the modernization and extension of outgrown apprentice laws and their adaptation to the requirements of proposed industrial schools.

In regard to rural schools, the commission advises the establishment of a central board of education, elected at large for each county, this board to engage a county superintendent and to consolidate school districts and discontinue schools at will. State aid is recommended for consolidated schools, provided agriculture or agriculture and domestic science are introduced, and provided courses of study and teachers shall be subject to the approval of the State superintendent. Additional State aid is recommended for State graded schools, village and city schools, and township high schools, with the same provisions specified for rural schools.

The commission further proposed that each county agricultural school shall receive from the State $6,000 per annum instead of the present sum of $4,000, provided that the county contribute not less than the State if the State contributes more than $4,000.

In order to illustrate how continuation schools may be adapted to the requirements of the State—in villages as well as in cities—the commission presents an elaborate survey of the field of German industrial education. The tendency of industrial schools to become theoretical instead of practical, and the manner of obviating the difficulty, are emphasized. The report says:

> After a long period of trial, the Germans have established almost universally local committees of business men, manufacturers, and workmen, who control these schools wherever they are * * *.
>
> We believe that the State of Wisconsin, instead of relying upon the establishment of trade schools such as have been set up in the thickly populated State of Massachusetts, should begin at once a plan of providing for this period of 14 to 16 years of age by means of continuation schools. In that way we can reach the greatest number at the least cost and we can allow the system to grow gradually and with the best results. It is the general agreement of all investigators * * * that boys are not generally wanted as apprentices before they are 16 years of age. Therefore, if they leave school at 14 they practically waste their time.

The recommendations regarding industrial education depend for their effectiveness upon the State University, which is relied upon to fill the gaps in the system and render it sufficiently elastic to meet local requirements without bringing too heavy burdens upon the poorer communities.

In regard to the training of teachers in industrial and agricultural schools, the report recommends—

That a minimum salary law be passed which shall apply to all teachers in industrial and agricultural subjects, and which, while placing emphasis upon thoroughgoing general training, shall place an additional premium upon special preparation for the teaching of agricultural and industrial subjects.

That adequate provision be made in some State institution of normal-school grade and in the country training schools for the establishment of courses of instruction in industrial and agricultural education and the extension of courses already in existence of a character that will give proper emphasis to industrial and agricultural training.

That the high schools in the State other than the free high schools, commonly known as the independent high schools, shall receive State aid for manual training, agriculture, and domestic economy to the same extent that State aid is granted to free high schools for these purposes.

ILLINOIS EDUCATIONAL COMMISSION.

The Illinois Educational Commission, appointed in 1907 and subsequently reappointed by Gov. Deneen, submitted a report to the forty-seventh general assembly. During the progress of its investigations, this commission has published nine bulletins embodying the results of its examination of the school laws and school systems of other States, and tentative recommendations relative to measures for improving the system of Illinois. These bulletins have excited wide attention. The report of the commission, and also three bills submitted by this body for legislative action, are considered under the head of General Laws, chapter 3, pages 71–72.

INDIANA EDUCATIONAL COMMISSION.

An act was passed at the sixty-seventh regular session of the General Assembly of the State of Indiana providing for "an investigation of the needs for and the methods of industrial and agricultural education." By this act, which was approved March 4, 1911, the governor was authorized to appoint—

a suitable commission of seven persons, either from within or without the public service of Indiana, representing the manufacturing, labor, agricultural, and educational interests of the State, to be known as the Commission on Industrial and Agricultural Education. The commission shall investigate the needs of education in the different industries of Indiana, and how far the needs are met by existing institutions, and shall consider what new forms of educational effort may be advisable and shall make such investigations as may be practicable through printed reports and the testimony of experts as to similar educational work done by other States, by the United States

Government, and by foreign Governments. The commission shall hold hearings in at least five different communities of the State and invite the testimony of interested parties and experts, and shall make a report to the governor for transmission to the legislature not later than January 1, 1913.

PENNSYLVANIA EDUCATIONAL COMMISSION.

The educational commission, constituted by the Legislature of Pennsylvania in 1907, to revise and codify the school law of the State, submitted a report at the legislative session of 1909. After numerous amendments had been made, the code was adopted by the legislature, but was vetoed by the governor, principally because the changes had introduced contradictory provisions and destroyed the harmony of the bill. The members of the commission, however, continued to meet at their own expense, and formulated a revised code eliminating the features which had failed to meet general approval. The principal features of this revised code, which was adopted by the legislature in the session of 1911, are presented in the chapter on General Laws, page 69.

SOUTH CAROLINA EDUCATIONAL COMMISSION.

The report of the commission to examine and revise the school law of South Carolina and recommend changes in the same was submitted to the general assembly on January 2, 1911. The new code was favorably reported in both houses, but final action was not taken. It is expected that the code will be adopted at the next session of the legislature.

OTHER COMMISSIONS.

The results of the labors of the school law commission of Idaho, created by legislative act of March 15, 1909, and of the committee appointed to investigate the conduct of the public school system of New Jersey, and of the special commission appointed for a similar purpose by the Legislature of Delaware in 1909, are presented in detail in chapter 3, pages 69, 73, 75.

A bill was passed by the Legislature of Montana authorizing the appointment of a commission to codify and collate the school laws.

The consideration of a bill providing for an educational commission to have general supervision and control of public educational institutions was indefinitely postponed in the Legislature of Minnesota.

The Forty-seventh General Assembly of the State of Illinois passed an act at its regular biennial session, approved May 26, 1911, providing for a commission to procure plans and specifications for a suitable State building, to be erected by the State, where all the property pertaining "to the history, science, literature, education, and patriotism now housed in different departments of the State

buildings may be placed." The department of public instruction is at present inadequately housed.

The General Assembly of Indiana, at its sixty-seventh regular session, passed an act, approved March 1, 1911, appointing a commission to formulate plans for the celebration of the admission of Indiana into the Union by the erection of a State building and its dedication in 1916, to be known as the Indiana Educational Building. The State library and museum, public library commission, and the educational and scientific offices of the State will be housed in this building.

II. EDUCATIONAL ASSOCIATIONS, CONFERENCES, ETC.

NATIONAL EDUCATION ASSOCIATION.

WINONA, MINN., *August 23, 1911.*

SIR: By the provisions of section 4 of the act of incorporation of the National Education Association by Congress, approved June 30, 1906, I am required to render to you, on behalf of the corporation of said association, an annual report, stating the amount of property, real and personal, held by the corporation and the various receipts and expenditures during the past year.

I am submitting herewith such a report, as follows:

The association holds as personal property approximately 10,000 volumes of proceedings in the depository of the association at the office of the secretary in Winona, Minn., valued at $10,000; 5,000 pamphlets and reprints, valued at $800; office furniture, cases, and equipment, valued at $500; total personal property at Winona, $11,300.

An office is maintained in the city of Washington, at 662 E Street NE., in accordance with section 8 of the act of incorporation, but the association owns no property, real or personal, in the city of Washington.

The business of the association is transacted at the office established by authority of the board of directors at Winona, Minn.

The association has a permanent invested fund, referred to in section 7 of the act of incorporation, which is in the charge of the board of trustees. This fund at the close of the last fiscal year, June 30, 1911, amounted to $180,000, $9,900 having been added to that fund during the fiscal year.

You will note that the net revenue from this fund amounted to $6,797.71, which was transferred to the treasury of the association for current expenses.

The fiscal year of the association is from July 1 to the following June 30, the last fiscal year closing June 30, 1911. For this last fiscal

year the total receipts for current expenses from all sources were $48,909.08; the total expenses for the year were $34,978.95; the amount transferred to the permanent fund was $9,900; leaving a balance in the treasury June 30, 1911, of $4,030.13.

The chief sources of revenue are membership fees, proceeds of sale of volumes and reports, and revenue from the invested fund.

The chief sources of expense of the association are the printing and distribution of the annual volumes, the maintenance of the secretary's office and clerical force at Winona, Minn., and the expense of preparing for and conducting the annual convention.

While a large part of the revenue comes from the associate membership fees received at the annual convention, a still larger amount comes as annual dues of $2 for each member from approximately 7,500 active (permanent) members of the association.

In view of the favorable financial condition of the association, the board of directors, under the advice of the committee on investigations and appropriations of the national council, appropriated the following sums to the respective committees as named, for investigations and reports:

Committee on uniform statistics and reports	$500
Committee on articulation of high schools and colleges	300
Committee on cosmopolitan high school	300
Committee on geometry syllabus in secondary schools	300
Committee on conservation of vision of school pupils	500
Committee on rural and agricultural education	1,000
Committee on economy of time in education	300
Total	3,200

In addition to the above appropriations, the active members at the annual meeting adopted, without discussion, a resolution directing the board of directors to appropriate $3,000 for the expenses of a committee to be appointed to make an investigation concerning salaries, tenure, and pensions of teachers, and to make report thereon. It is probable that this report will be principally devoted to the relations of the increased cost of living to teachers' salaries and be supplementary to the report of the committee on teachers' salaries, tenure, and pensions, made in 1905, under the chairmanship of Hon. Carroll D. Wright, at that time United States Commissioner of Labor, and for the preparation of which the association expended much more than $3,000, in addition to Government aid through gratuitous services of Government statisticians. This report has been extensively distributed and is still in active demand and could hardly be superseded.

The last convention of the association, the forty-ninth, held at San Francisco, Cal., July 8 to 14, was in every respect successful.

The total registration was 11,480. This registration was slightly less than the registration last year at Boston, which was 12,385, but larger than the registration at Denver in 1909, 5,375, and at Cleveland in 1908, 8,328. The most prominent feature of the convention was the opening session held in the Greek Theater at the University of California, in Berkeley. The addresses of welcome were delivered by Gov. Hiram W. Johnson, of California, Mayor P. H. McCarthy, of San Francisco, and President Benjamin Ide Wheeler, of the University of California. The introduction of President Ella Flagg Young was made by Josiah Little Pickard, of Cupertino, Cal., who was president of the association at its meeting in 1871, and who was associated with President Young in the Chicago public schools in 1865 and later.

The other general sessions and the sessions of all the 17 departments were successful, as usual. While a great variety of important topics were discussed, moral education, industrial education, physical education, school hygiene, the education of subnormal children, and the relation of high schools to colleges received the most attention. Probably the most important discussion was that of the report of the committee on a system of moral education in public schools, by a committee of the council that had been working on this subject for several years. This discussion closed with a joint session with the Religious Education Association, at which addresses were presented by members of that association on various phases of the committee report.

The following associations met with the National Education Association in convention, each such association holding its own series of meetings, as follows: The Federation of State Teachers' Associations, The American School Peace League, The School Garden Association of America, The Religious Education Association, The Educational Press Association of America, and The American Home Economics Association.

The following general officers were elected for the ensuing year: President, Carroll G. Pearse, of Milwaukee, Wis.; vice president, Ella Flagg Young, of Chicago, Ill. (the outgoing president), and 10 others; treasurer, Katherine Devereux Blake, of New York City. There were also elected one director for each State and Territory, including Hawaii, the Philippine Islands, and the District of Columbia.

The executive committee for the ensuing year will be constituted as follows: Carroll G. Pearse, president, superintendent of schools, Milwaukee, Wis.; Ella Flagg Young, first vice president, superintendent of schools, Chicago, Ill.; Katherine D. Blake, treasurer, principal, public school, New York City; James M. Greenwood, chair-

man of trustees, superintendent of schools, Kansas City, Mo.; John H. Phillips, member by election, superintendent of schools, Birmingham, Ala.

The board of trustees for the ensuing year will be as follows: James M. Greenwood, superintendent of schools, Kansas City, Mo., chairman; Robert J. Aley, president of the University of Maine, Orono, Me., secretary; J. Stanley Brown, principal of Township High School, Joliet, Ill.; James Y. Joyner, state superintendent of public instruction, Raleigh, N. C.; Carroll G. Pearse, superintendent of schools, Milwaukee, Wis.

I am, respectfully, yours,

IRWIN SHEPHERD, *Secretary.*

Hon. P. P. CLAXTON,
Commissioner of Education of the United States,
Washington, D. C.

DEPARTMENT OF SUPERINTENDENCE, NATIONAL EDUCATION ASSOCIATION.

The Department of Superintendence, National Education Association, met in Mobile, Ala., on February 23–25, 1911. The first session was devoted to a review of the vigorous educational movement in the Southern States. At the second session Mrs. Ella Flagg Young, superintendent of schools of Chicago, Ill., and president of the National Education Association, discussed the status of present elementary school instruction, pointing out the great advance in the physical, mental, and vocational training now afforded, as compared with the past two decades.

The program of the second day was given to a discussion of recent educational advances in respect to the city, the State, and the Nation. Hon. Charles E. Chadsey, superintendent of schools, Denver, Colo., spoke from the viewpoint of the city; Supt. Carey, of Wisconsin, discussed "the rapid evolution resulting from the assistance which the various States are giving to education through the training of teachers, better laws for education, and greater funds." Hon. Elmer E. Brown, United States Commissioner of Education, discussed education as a national function, emphasizing "the necessity for cooperation between the various States in fixing a uniform standard of the various classes and grades of schools, in the certification of teachers, etc."

At the round-table meetings in the afternoon of the second day, the problem of economic administration received considerable attention. Supt. J. H. Van Sickle, of Baltimore, displayed charts showing the actual results obtained from the use of the three-group system in reducing the number fo nonpromotions.

The Saturday sessions were occupied with discussions of the open-air schools of Chicago, defective children, etc.

At the annual business meeting Prof. George D. Strayer submitted a report of the committee on uniform reports and records, and Prof. Henry Suzzalo presented the report of the committee on economy of time in education. The report of the committee on the uniform key alphabet provoked considerable debate. The report was finally adopted by a vote of 403 to 368 and the committee was discharged.

Resolutions were passed commending the work of the United States Bureau of Education, and recommending—

the adoption by school authorities of the forms of record and reports as submitted by its committee on uniform school reports, provided that said forms shall be modified and improved as may be found expedient from year to year by conference of the United States Bureau of Education, the Bureau of the Census, the National Association of School Accounting Officers, and the committee on uniform school records and reports of the Department of Superintendence.

The Department of Superintendence recognizes that the present lack of uniformity in nomenclature found in texts in English grammar is confusing and unnecessary. It therefore authorizes the president of this department to appoint a committee of five to formulate and report at the next annual meeting of this department a system of nomenclature for texts in English grammar, and recommends that publishers of such texts use this system if adopted by the department.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE: SECTION L—EDUCATION.

At the Minneapolis meeting of the American Association for the Advancement of Science, Section L held five sessions. The first was a joint session with the American Psychological Association, at which reports were made on experimental investigations, as follows: "Individual differences in the correlations of physical growth of elementary and high school pupils," by Bird T. Baldwin; "Experiments on the perception of number," by Frank N. Freeman; "The genesis of attention in the educative process," by Edgar James Swift; and (*a*) "Periods of work in learning," (*b*) "Transference of practice," by Daniel Starch; "The field of the consulting psychologist," by C. E. Seashore; "What is educational psychology?" by Frederick E. Bolton.

The second session was a joint session with the American Federation of Teachers of the Mathematical and the Natural Sciences. At the meeting the topic, "Methods of testing results of science teaching," was discussed by Prof. E. L. Thorndike, of Columbia University, and Prof. O. W. Caldwell, of the University of Chicago, presented reports of an experiment in testing the results of science teaching now in progress at his school.

The third session was the general-interest session at which the topic "University extension teaching" was discussed by President A. Ross Hill, of the University of Missouri; President C. R. Van Hise; Prof. Louis E. Reber, of the University of Wisconsin; and Prof. Albert W. Rankin, of the University of Minnesota.

The fourth session was devoted to reports of the investigations in education, as follows: "The causes of elimination from high school," by J. K. Van Denburg and E. L. Thorndike, Columbia University; "The relations between the high schools and the colleges," by C. H. Judd, University of Chicago; "Experience with the system of grading in the University of Missouri," by Max Meyer, University of Missouri; "New facts concerning retardation," by G. D. Strayer, Columbia University; "A study of retardation in the schools of Minnesota," by F. E. Lurton, superintendent of schools, Anoka, Minn.; "Popular misconceptions of precocity in children," by M. V. O'Shea, University of Wisconsin; "The problem and content of a course in social education," by Irving King, University of Iowa.

The topic of the fifth session was "The transfer of discipline." The following papers were presented: "Transference of practice," by W. F. Dearborn, University of Chicago; "Transfer of training, with special reference to the factors of rapidity and accuracy," by S. S. Colvin, University of Illinois; "Some experiments in transfer of discipline," by G. G. Fracker, State Normal School, Marquette, Mich. General discussion followed by Messrs. Angell, Cattell, Judd, O'Shea, Seashore, Thorndike, and others.

AMERICAN FEDERATION OF ARTS.

The American Federation of Arts met at Washington, D. C., May 16-18, 1911. Delegates from over 70 chapters—museums, public libraries, artists' and laymen's organizations—were present. The Hon. James Bryce, British ambassador, and the Hon. John Barrett, director of the Pan American Union, made brief addresses of welcome. Prof. George P. Baker, of Harvard University, in an address on pageantry, showed the advantages to be derived through this medium in arousing the interest of the people in "the picturesqueness of their own history and the nobility of their own occupations." By the proper employment of pageantry, the natioal holidays would take on new significance. Mr. Henry T. Bailey spoke on art in the public schools, which, as he pointedly observed, is "no longer copying straight-line figures and vase forms, or the making of abstract designs, but the application of the fundamental and unchanging principles of art to the daily life of the child." The needs and advantages of a national school of industrial art were emphasized by Mr. Leslie W. Miller, principal of the Pennsylvania Museum and School of Industrial Art, at Philadelphia. Hon. Charles D. Walcott, secretary of the Smithsonian Institution, following Mr. Miller, told of the development of a National Museum of Industrial Art as a branch of the National Gallery. The subject of civic art was discussed by Mr. Raymond Unwin, of England, and Mr. Walter G. Page. Mr. H. W. Kent, of the Metropolitan Museum of Art, proposed that

the federation "should serve as a clearing house for art museums, not only circulating exhibitions but correlating and distributing information."

The secretary reported that lectures on American painting, American sculpture, and civic art had been in constant circulation; that 9 exhibitions had been sent to 33 cities.

The following officers were elected to serve for two years: President, Charles L. Hutchinson, of Chicago; secretary, F. D. Millet, of New York.

AMERICAN FEDERATION OF TEACHERS OF THE MATHEMATICAL AND THE NATURAL SCIENCES.

The annual meeting of the council of the American Federation of Teachers of the Mathematical and the Natural Sciences was held at the University of Minnesota, Minneapolis, Minn., December 28, 1910. On December 29, the federation held a joint session with Section L, American Association for the Advancement of Science.

The committee on college entrance requirements in mathematics and science submitted the following resolutions for adoption:

Resolved, That we urge the colleges to abandon the "unit system" and in its place to accept the certificate of the high school at its face value for such work as it covers, and permit this to entitle the student to take up such college work as his preparation may warrant, whenever the certificate stands for four years of systematic and thorough training in a good high school; and

Resolved, That we recommend that the merits of the high school for such certification be determined by conference between schools and colleges in such associations as the North Central Association of Secondary Schools and Colleges, so that due weight may be given both to what the colleges desire and to what the schools can safely undertake; and

Resolved, That we request the colleges to consider whether the work done by its students in college does not in large part furnish a better basis for testing the efficiency of school preparation than do the present methods of entrance examination and of official inspection; and

Resolved, That as we consider the larger and the more important duty of the secondary school is the preparation of the students for immediate entrance upon useful life in their own communities, we believe the college should cease to discriminate against subjects that the schools find necessary in preparing their pupils for such duties; and

Resolved, That we invite the college to come into more intimate contact with the secondary schools by requiring their professors who give general courses to do some visiting of the secondary schools at frequent intervals, so that they may acquire a better personal acquaintance with high-school work and high-school conditions; and

Resolved, That we urge upon college men that they take a larger part in the work of teachers' associations, so as to secure real acquaintance and earnest cooperation, based upon mutual consideration and esteem; and

Resolved, That we urge the colleges to offer greater facilities for the adequate training of teachers; that liberal courses in pedagogy be established and ample opportunities be offered for practice teaching. Such influences for professional training, we believe, will do far more to raise the standard of work in our high schools than the present entrance requirements or system of inspection.

AMERICAN PHYSICAL EDUCATION ASSOCIATION.

The eighteenth convention of the American Physical Education Association was held in Boston, April 11–14, 1911. Dr. George L. Meylan, of Columbia University, in his presidential address, cited the fact that "the association has exerted a potent influence in bringing about the remarkable development in physical education which has taken place in the United States during the last 25 years." The period from 1905 to the present time "has been characterized by considerable progress in various directions; first, the raising of standards in the professional schools of physical education. Six years ago, less than 10 per cent of the graduates in physical education received the bachelor's degree at graduation, whereas now over 30 per cent complete courses leading to the first degree, and an increasing number pursue graduate studies for the master's and doctor's degrees; and, second, during this period has occurred a phenomenal growth of interest in all matters pertaining to the conservation of life and health, and the normal physical development of children, public and personal hygiene, and all matters pertaining to health and healthful living. All these interests are related more or less closely to physical education in its broadest sense. Of these new interests those which are most directly related to physical education are the playground and school hygiene movements."

That the value of physical education is now completely recognized in American colleges is shown by statistics gathered during the past year by the association from 124 of the leading colleges and universities. Dr. Meylan said:

Ninety-five per cent offer regular courses in physical education and in 87 per cent these courses are prescribed.

The prescription applies to freshmen only in 27 per cent of the colleges, to freshmen and sophomores in 44 per cent; in the other institutions the courses are prescribed for more than two years or only to students who are below a certain standard at entrance.

In more than half of these colleges the courses in physical education were prescribed later than the year 1900.

The standing of these courses in the college curriculum is shown by the fact that positive credit toward the bachelor's degree is given in 58 per cent of the colleges and the students are marked for proficiency as in other courses in 63 per cent of the institutions.

Ninety-eight per cent of the colleges have gymnasium facilities, 96 per cent have athletic fields, and 37 per cent have swimming pools.

The academic standing of the directors of physical education in colleges is steadily increasing. Seventy-six per cent have seats in the faculty, 25 per cent have the title of professor, and out of 58 per cent who have the title of director of the gymnasium or physical director many have professional rank.

There are no recent figures on the present status of physical education in private secondary schools. Nearly all have some form of physical education and many of them have a well-organized department in charge of a competent director.

Dr. Gulick has secured valuable statistics showing the status of physical education in normal schools, public high and elementary schools.

Seventy-six per cent of the normal schools have regular instruction in gymnastics and 43 per cent in athletics. Courses in gymnastics are prescribed in 68 per cent of the normal schools, and 48 per cent give credit for these courses.

In the public high schools only 8 per cent offer regular instruction in gymnastics, 5 per cent prescribe this work, and only 3 per cent give academic credit for it.

The figures for public high and elementary schools show a very small percentage of schools with regular instruction in physical education, but that is due to the very large proportion of small rural schools included in the compilation. General observation would lead one to believe that the majority of schools in cities of 10,000 population or more have some form of regular instruction in physical education.

Many valuable papers were read. The association at this meeting recognized the physical director as an administrator. The larger part of the program of the convention was given over to the discussion of this topic.

AMERICAN INSTRUCTORS OF THE DEAF.

The nineteenth convention of American Instructors of the Deaf was held at Delavan, Wis., July 6–13, 1911. The various papers and conferences dealt with "the basic conceptions of education in its relationships to life preparation, to life ideals, and to democracy." The literary and industrial curricula of the school for the deaf, the subjects to be taught, and the pedagogic process were considered at length. Papers were read on kindergarten methods, art work, physical culture, moral and religious training, and preparation for Gallaudet College. Dr. A. L. E. Crouter, in his paper on "The possibilities of oral methods in the instruction of deaf children," laid stress on the necessity of the careful development of speech and lip reading during the first years of the deaf child's training, and for the cultivation of these acquisitions during his entire school life. He said in part:

I have witnessed the complete success of such efforts with all classes of pupils so often that I am fully persuaded that the acquisition of intelligible speech and good practical, not to say expert, lip reading is well within the powers of our average pupils. I have conversed with pupils fully 50 feet away in a very satisfactory manner and upon a variety of topics. I have conducted chapel service times without number, speaking to 150 to 180 pupils at a time on moral and religious subjects with ample proof that I was intelligently understood by the majority of my audience. Indeed, from frequent experiences of this character, I am led to believe that with proper training and under favorable conditions the future will witness results of this nature little dreamed of at this time. * * *

It is a striking proof of the advantage gained by presenting language through speech and lip reading that oral classes make as much progress in language during their first years in school as was formerly made under manual methods, notwithstanding the time spent on articulation drill. * * *

After an experience of a good many years, covering all phases of the work, I am convinced that there are few deaf children—not more than 2 or 3 per cent of average capacity—who are not able, under careful, skillful training, to acquire sufficient speech and lip reading for all classroom work and for general purposes of communication outside the classroom.

Indeed, I have come to the conclusion, after careful observation of results, that a deaf child that can not thus be instructed can not be instructed at all.

The speaker added that when the born deaf are educated under oral methods, we usually find among them—

a very large number of cases of highly satisfactory development, while of the adventitious deaf (pupils deaf from two to four years), the semideaf, and the semimutes, constituting fully 66 per cent of the pupilage at the Pennsylvania School, there are almost no cases of absolute failure to acquire a good, intelligible command of speech and lip reading.

CATHOLIC EDUCATIONAL ASSOCIATION.

The seventh annual meeting of the Catholic Educational Association of the United States was held at Detroit, Mich., July 4–7, 1910. Delegates were present from all the States and from the Dominion of Canada. The papers read at this convention dealt largely with subjects of a practical character. Resolutions were passed urging the pastors of the Catholic Church in the United States "to interest themselves more and more seriously and actively and constantly in the Catholic institutions of secondary and higher education."

Industrial training was discussed at length. Rev. H. C. Boyle remarked:

Either we must equip industrial centers of our own in the large cities at very considerable expense, or we must move for the admission of our parish-school children to the public-school centers already established. Some of the best industrial schools abroad are conducted under Catholic auspices—that of the Christian Brothers in the Rue de Vaugirard, Paris, is a notable example. * * * It is no strange work to which we are asked to set ourselves, but we are asked to undertake it under strange and unusual conditions. Shall we do it? is the question that presses for an answer. Or shall we take advantage of the public industrial schools, our schools, too, that are springing up with such astonishing rapidity in every city and town from Maine to California?

Officers for the year 1910–11 are: President general, Right Rev. Mgr. T. J. Shahan, Washington, D. C.; secretary general, Rev. Francis W. Howard, Philadelphia, Pa.

The eighth annual convention of the Catholic Educational Association was held in Chicago June 25–29, 1911. The report of the committee on secondary education was read by the Very Rev. James J. Burns. The present status of Catholic secondary education in the United States was set forth with the aid of statistics collected by the committee, and "the means for the development of a system of central Catholic high schools were enthusiastically considered." A resolution was passed by the association recognizing and approving of the Catholic high-school movement. The parish-school department, in one of its resolutions, made the following statement:

We desire to emphasize the fact that the aim of elementary education is discipline—the training of the will to habits of virtue, study, and industry. We protest against any tendency to replace it by seeking to procure in the first place mere information or mere manual or mental efficiency.

CONFERENCE FOR EDUCATION IN THE SOUTH.

The fourteenth Conference for Education in the South was held at Jacksonville, Fla., April 19–21, 1911. Mr. Robert C. Ogden, of New York, president of the conference, delivered an address outlining the purposes of the meeting. In regard to the educational conditions in the South he said:

> The most important advance recently made is the appointment, attached to the State office of education, of supervisors of rural schools. This work has been started in all save two of the Southern States. It required an open mind, a vivid imagination, and high constructive leadership to conceive and to execute this plan. The quarterly reports from these supervisors read like apostolic enthusiasm in their expressions of hopeful earnestness. They include the visitation of summer schools for teachers, conferences with county superintendents that should reveal the attitude of each of them toward educational progress, methods of supervision, systems of records, consolidation of schools, and local taxation. Then meetings were called by county superintendents of school trustees for discussion of rural school conditions and problems covering the whole range of school buildings, teaching, transportation of scholars, and consolidation. The farm-demonstration education has been going on without pause on the farms and in the boys' corn clubs. The professors of secondary education have been diligently at work on the high-school problems with varying success but always with progress. The school-improvement leagues are combining their beneficent labors. The crusade for the local tax is fully maintained.
>
> All the foregoing items have direct relation with and are supported by the General Education Board or the Southern Education Board, thus having a close community of interest with this conference and therefore are entitled to consideration.

President E. C. Branson, of the Georgia State Normal School at Athens, discussed "The condition of farm life in some Southern States." The speaker made the point that the culture of the farmers was more important than the form of agriculture. He said:

> We have been brought to realize keenly that country life is menaced by (1) the accelerated growth of cities and the dwindling ratio of country dwellers, (2) farm tenancy, (3) the meager share of the farmer in the wealth he creates, and (4) the isolation of life in the farm regions. In brief, like other nations of the world, we are undergoing transformation from an agricultural to an industrial civilization, and we have been ill conditioned for the change. The farm has been sacrificed to the industrial growth of the country. And this is true in England. Denmark, Holland, New Zealand, and Germany have been wiser. Their Governments have become gigantic institutions for the promotion of national well-being; gigantic business concerns based on cooperative principles. In all of them the relation of agriculture to the general welfare is legislatively recognized, and farm life is promoted and protected. They are wise enough to know that rural decay involves national disaster.
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> Our own statesmen need to be reminded that farming is still the biggest business in the United States; that the capital invested in it is greater than the capital invested in railroads or manufacture; that it is, indeed, nearly four-fifths as great as their combined capital.

President Branson declared that the defenses of country life are (1) improved public highways, good schools, and good churches; (2) better methods in agriculture, better business, and better living on

the farm; (3) organization and cooperative enterprise among the farmers; and (4) a sympathetic federation of rural-life forces.

Dr. Paul Ritter, envoy extraordinary and minister plenipotentiary from the Republic of Switzerland, delivered an address on "The adaptation of education to life in Switzerland."

Count Carl Moltke, envoy extraordinary and minister plenipotentiary from the Kingdom of Denmark, spoke upon the methods of education in Denmark.

Dr. John C. Bay, of Chicago, read a paper on "The folk high school and rural life of the Scandinavian countries."

Dr. J. N. Hurty, of the Indiana State Board of Health, spoke on "The child in the making." Among other things he called attention to "the inalienable right of the child to be born free from defects, free from disease, and with pure blood." To secure this right, society should see to it that the diseased, the defective, and those of impure blood should not have children. He said:

> Acquired defects must be removed early in the child's life, or corrected when removal is not possible. Sickness and disease must be prevented, and to fail to accomplish this when it is so clearly within our power marks us as delinquent. The child should receive a generous education, and be trained morally both by parent and by the State.

The paper by Mr. Clarence Poe, editor of The Progressive Farmer, Raleigh, N. C., on "Asia's greatest lesson for the South," presented a graphic contrast between the industrial conditions of the Orient and the Occident. He said:

> The prosperity of every man depends upon the prosperity (and therefore upon the efficiency) of the average man. The welfare of every individual depends upon the uplift of the great masses of the people. The most impressive fact that I discovered in all my trip through the Orient was the fundamental world-wide importance of this too little accepted economic doctrine. It is the biggest lesson that the Old World has for the new. The South especially has been too slow to accept it—and has paid the penalty of its delay in a tragically belated development.

The third day's session was devoted to the annual meeting of the Southern State Superintendents' Association, which always meets in conjunction with the conference. A brief summary of the progress of education in the South during the year was presented by Mr. J. N. Powers, secretary.

The annual meeting of School Improvement Workers was also held in connection with the conference.

LAKE MOHONK CONFERENCE OF FRIENDS OF THE INDIAN AND OTHER DEPENDENT PEOPLES.

The twenty-eighth annual meeting was held at the Lake Mohonk Mountain House, October 19–21, 1910. The topics discussed included affairs among the Indians and in the Philippines, Porto Rico, Hawaii,

and Guam, recognizing, however, that the peoples of some of these regions can not be classed as "dependent peoples."

The president of the conference, Dr. Elmer Ellsworth Brown, in his closing address, summed up the salient features of the meeting. Speaking of the Indian, he said:

So far as the Indian is concerned this twenty-eighth conference has reiterated the demand for a steady movement away from the tribal reservation system to the individual citizen system, with separate holdings, taxes, and all the rest. The most significant single thing done in that direction this week has undoubtedly been the reception of the report on the New York reservations presented by the strong committee that was named by this conference a year ago, together with the appointment of an additional committee to carry into effect the intent of this report. The end in view is the closing out of the reservations, and the allotment of lands in severalty to their occupants.

The first step toward that end is really to determine what is the legal situation of these reservations at the present time, and what legislation is necessary to bring about their dissolution. That step the new committee is expected to take by enlisting the activity of both State and National authorities.

The Commissioner of Indian Affairs has given us some significant glimpses of the Indian Service in its practical working.

As regards the Philippines, there has appeared an unmistakable sense of uneasiness, a fear that the development of the islands may get in ahead of the development of the islanders. The difficulties and perplexities of the situation have been clearly shown by several speakers, notably by the former secretary of education in these islands. No part of the program of this meeting, I am sure, has commanded greater interest than the series of impressive papers on Philippine subjects. In sounding its note of warning against the spirit of exploitation in the Far East, the conference has lent new emphasis to its declarations of other years, its declarations concerning the Indians and all other dependent peoples, that the first place in the American program is to be given to helping the backward people to self-help and self-government, and that even commercial ambition must pause a little to give right of way to this finer Americanism.

The following resolutions were passed:

Resolved, That in any reorganization of the Territorial government of Alaska, provision should be made for educational service among the Alaskan natives on a plan at least as generous and effective as that now in operation.

Resolved, That this conference regards with favor the movement to organize a society for promoting public familiarity with Philippine affairs.

NATIONAL CONFERENCE ON VOCATIONAL GUIDANCE.

The first National Conference on Vocational Guidance, called by the Boston Chamber of Commerce and the Vocation Bureau of Boston, was held in Boston, November 15 and 16, 1910. Forty-five cities sent delegates, and great interest was evinced in the meetings. Manufacturers, workmen, business men, social workers, and educators participated in the discussions. President Bernard J. Rothwell, of the chamber of commerce, expressed the interest of the business man in the subject of expert vocational counseling at the critical period before boys and girls leave school for work.

Prof. Paul H. Hanus, head of the department of education in Harvard University, outlined the basic principles on which proper vocational guidance must rest. He said:

> One large aim in vocational guidance is to develop the methods and material by which the public schools may help fit their individual graduates for the work they are likely to do, and in this effort to use all the spiritual, economic, educational, and other agencies which may cooperate to bring about the fullest information and the best suggestions.

He deprecated the prescribing of vocations, and—

> the curtailing of the child's privilege to enjoy the most liberal opportunities for growth and happiness that the schools can provide. * * * Nevertheless, it has become necessary to face the future problems of thousands of boys and girls who must leave school at 14, and the time has come for the establishment of a service that would help parent, teacher, and child in wisely planning for a life work, and for making demands upon commerce and industry in the direction of a better investment of youth's powers in the field of wage earning.

President Emeritus Eliot, of Harvard, spoke on the adjustment required in the common-school education to stimulate the life-career motive.

The activities of vocational guidance, as outlined at the conference, fall into four general groups:

First, giving information about vocations in general and about the opportunities for work in the immediate vicinity, and also about opportunities for receiving vocational education.

The second group relates to children, when it is necessary to make the transition from school to work, and advising as to the importance of wise choice between temporary employment, however remunerative, and positions which offer opportunity for advancement.

The third group relates to the guidance and sympathetic counseling of the young worker subsequent to his entry into his new duties.

A fourth group looks to the establishment of vocation bureaus for the collection of information about opportunities for boys and girls in the trades and stores, as well as the provision for vocational training, and the classification of this information in forms available for ready reference.

The opinion was generally expressed that ultimately this function should be taken over by the public schools. The Boston schools, it was stated, have now at least one vocational adviser in each of the elementary and high schools.

Addresses were made by Prof. Felix Adler, who spoke on the ethical and economic implications of vocational guidance; Dr. David Snedden, Prof. Charles Zueblin, Samuel McCune Lindsay, and Dr. Richard C. Maclaurin, president of the Massachusetts Institute of Technology. Dr. Maclaurin said:

> Vocational guidance, as I see it, is to be of inestimable value because it will disclose what we need in vocational schools. We must make modern industry a part

of the liberal education, so as to give it a basis for vocational choice. Vocational guidance will react on all our educational systems, the industrial quite as much as the nonindustrial,

NATIONAL ASSOCIATION OF MANUFACTURERS.

The sixteenth annual meeting was held in New York, May 15–17, 1911. A report was presented by the committee on industrial education, the members of which were: Mr. H. E. Miles (chairman), Mr. John L. Ketcham, Mr. Anthony Ittner, Mr. Milton P. Higgins, and Mr. E. F. DuBrul. After outlining the changes that have taken place in industrial and social conditions in the United States, the report calls attention to the fact that—

Almost all of the children who enter the industries enter at the age of 14. The working people of the country who wish their children to enter the industries take them out of school at 14, knowing from experience that if they stay in school until 16 they will have passed the psychological time when industry beckons—will have acquired other tastes, and will never enter the industries. The American-born mechanic, then, is the boy who entered the shop at 14, grown up. Therefore, as good citizens and as employers, it is for us to give especial consideration to the educational problem as it concerns children of 14 to 16.

As stated in the report of the Wisconsin Bureau of Labor for 1910, only 12 per cent of the children employed under 16 years of age are in position to learn a trade. Of the remainder, a great proportion are employed at such simple routine tasks as are detrimental to both mind and character. The great body of those who enter the cursory occupations become newsboys, errand boys, etc. When these boys reach maturity and have the aspirations of men, their occupations have made them unfit for the better work of the trades.

The report discusses how Germany and other countries have attacked the problem of industrial education. It says:

Germany apparently prefers that the great body of her children shall enter the industries at 14. The point is that the state goes into the industry with the child; the hand of the child is kept within the hand of the state; the child is led and directed continuously from the time of his entrance into the industry at 14 until his seventeenth or eighteenth year. Instructors watch the work of the child in the factory, and, upon compulsion of law, every child goes back to the school from the factory for a period of from 7 to 10 hours per week. The school to which he goes is the industrial school, there called the continuation school, for in this school the education of the child worker is "continued." The shop practice of every trade is secured in the factory.

The small, almost inconsiderable, investment in apparatus, the dependence upon the factories for practice and machinery, enable the German industrial school to teach as many industries as are represented in the several communities. Each school teaches many industries, so that the children of each community become skilled employees in the various industrial institutions of that community; and, per contra, every home industry finds skilled, capable, and willing employees in the children of its community. The American trade school, as primarily conceived, made a great investment in machinery and plant. It was impossible to teach all occupations, for that would require as many plants as there are industries in each community. Our trade schools have therefore for the most part confined themselves to four occupations only—woodworking, bricklaying, plumbing, and metal working. In Germany every trade is taught. Wurttemburg, Germany, for instance, has a population less by one-fourth of a million

persons than the State of Wisconsin. It is "on the whole a poor, hilly country, with very poor transportation facilities." "It has, besides its splendid system of elementary and secondary schools, about 250 industrial schools in its towns and villages."

The single city of Munich, Bavaria, has about 47 of these industrial schools. Contrast the city of Milwaukee, which is about the same size, with its one trade school, representing a great investment, teaching only the four occupations above named, and to only half as many students as it was planned to accommodate. These schools of Munich are maintained at marvelously little expense per student, and teach all the trades of Munich, including the following, for instance: Book printer and typesetter, lithographer, photographer and zinc-plate worker, stucco worker or ornamental sculptor, tinsmith, bather, wig maker, baker, hotel keeper (including hotel carving), wood carver, jeweler, gold and silver worker, merchant, confectioner, pastry cook, butcher, tailor, clerk and office assistant, shoemaker, turner, druggist, glazier, chimney sweep, coachman, saddler and trunk maker, cooper, lockmaker, upholsterer and decorator, potter and stove builder, watchmaker, wheelwright. By what right does an American community take the money of the whole community and use it only for those children who wish to enter the four trades here occasionally taught, and fail to educate the children who select other occupations? How can a community justify itself in raising the standards of four trades only and forgetting the dozens of other trades? If the system is right it must be applied to all; if it is not right it should be applied to none.

In conclusion, the committee particularly emphasizes—

the fact that none of its findings are to be taken as prejudicial to any of the existing methods of industrial education. There are private shop schools here and there, like those of the General Electric Co., the International Harvester Co., and the Baldwin Locomotive Works. There are expensive trade schools like the Milwaukee, with a high cost and a small attendance; and better, the Worcester Trade School, which is both a full-time school, where about 115 pupils are given continuous all-day instruction, a continuation school for another class of boys who are instructed for one day in the week, and an evening school for those who can only avail themselves of its privileges after the day's work. The Cincinnati system is, in most respects, a continuation school with two sets of boys alternating, each having a week in the shop and then a week in the school. The Cincinnati University similarly requires only alternate weeks of the student's time, the other weeks being devoted to the shop. It gives the highest sort of engineering and polytechnic training at from one-third to one-half the expense of the old-time polytechnic institute. All these and other schools are an infinite blessing to such of our youth as are there accommodated. Without these beginnings of a complete, well-digested national system we would be benighted indeed. Out of them and the present widespread study of the problem will soon come the complete national system which will do for all of our industrial youth what the old common-school system is made to do along cultural lines only.

The time is ripe for action. When the American people really awaken to a great public need they usually act quickly. Massachusetts has made a great start. Wisconsin is likely to establish at once the continental system, splendidly Americanized and adapted. Cities, towns, and associations are acting independently. Our children can neither stand still nor wait. The procedure is simple; action should be immediate.

The association passed a resolution favoring "the establishment in every community of continuation schools, wherein the children of 14 to 18 years of age now in the industries shall be instructed in the science and art of their respective industries and in citizenship."

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION.

The fourth annual convention was held in Boston, November 17–19, 1910. There were seven sessions, exclusive of the business meeting, at which many notable papers were read. The first session was devoted to the consideration of the "Demands and opportunities for girls in trades and stores;" the second session, to "The training of teachers for girls' trade schools." At the banquet, the third session, emphasis was laid on the boy to be trained quite as much as on the industry to be served by a system of industrial education. Mr. Charles H. Winslow, representative of the American Federation of Labor, stated the position of organized labor. The fourth session was given over to a discussion of "Apprenticeship and corporation schools." Mr. G. M. Basford, summarizing the movement for such schools, said:

People are beginning to understand that the industrial progress of Germany is not due to her superior technical educational methods so much as it is due to her consistent adherence to apprenticeship. Technical education has done much in Germany, but without the substructure of workmen skilled through apprenticeship the education would not have brought that country to its present position. We now know that Germany does not depend upon trade schools, as we understand the term, but upon apprenticeship, upon continuation and improvement schools, for skilled and intelligent workmen. These continuation schools are attended by apprentices, and the improvement schools by those who have completed apprenticeship.

We need skilled workmen who understand their work and its relations to the work of others, and who are prepared in citizenship to take their places in the organization of human life. To supply the need we must train the hands and the minds of our recruits. The present emergency seems to compel us to take the school to the boy for the training of the mind. Our greatest work is in the shop. The boy is in the shop and we must move the school to him, for we can not move him to the school. We can not wait for the educators to adapt themselves to our problem, but must take it in hand ourselves—hence the corporation school. Whether or not the corporation school is permanent is a question which may be safely left to the future. At present it meets an urgent need and will meet it until cooperation with public schools may be effected.

It is perfectly safe to accept the proposition that apprenticeship is to be a permanent factor as an American institution. By this is meant the new apprenticeship, involving real shoptraining by men who have direct responsibility for teaching trades, and have time for this work because they have nothing else to do. Trade schools, unless followed by apprenticeship, do not and I believe can not, meet the industrial need of the times. Advocates of trade schools do not claim that complete preparation for trades may be given in such schools. The boy from the trade school needs apprenticeship for two reasons: First, to provide for his entrance into a manufacturing organization, and, second, to complete his trade training. The need is so great as to justify encouragement of every possible method of providing relief. It is, however, significant that the number of authorities on this subject who believe that real apprenticeship is the only method of teaching trades is rapidly increasing.

The fifth session was devoted to "Part time and evening schools."

At the sixth session Dr. Georg Kerschensteiner, superintendent of schools, Munich, Bavaria, spoke on the Munich system of industrial continuation schools.

The last session was occupied with the consideration of the social meaning of industrial education.

NATIONAL ASSOCIATION FOR THE STUDY AND EDUCATION OF EXCEPTIONAL CHILDREN.

The National Association for the Study and Education of Exceptional Children held its annual meeting in New York City, April 29, 1911. Dr. Franz J. A. Torek, president, presented a report, calling attention to the fact, among other matters, that Dr. Maximilian P. E. Groszmann, educational director of the association, had begun to take the initial steps for what is termed field work, by suggesting a series of intelligence tests in the public-school systems of Plainfield, N. J., and near-by communities. Dr. Groszmann reported interesting and encouraging developments during the past year, his own work being more than ever devoted to the research side of problems relating to exceptional children, and to the building up of a central information bureau and reference library at the Institute for Atypical Children, at Plainfield, N. J., which is conducted under the auspices of the national association.

NATIONAL LEAGUE OF COMPULSORY EDUCATION OFFICERS.

The first annual convention of the league was held in Chicago June 2–3, 1911. The object of the organization is to bring about a spirit of cooperation among the heads of compulsory education departments throughout the country and to work for uniform compulsory education laws in each State. The meetings are held for the purpose of general discussion of the causes of truancy, the prevention and handling of truancy cases, and of a national organization for the promotion of school attendance throughout the country.

SOCIAL CENTER CONFERENCE.

The first Social Center Conference met at Dallas, Tex., February 17, 1911, in response to a call issued by Col. Frank P. Holland.

The sessions were devoted to the study of the civic, social, and recreational problems of rural communities and the best methods of developing the use of the country schoolhouses as a means of meeting them, and the needs of the cities of the Southwest.

TERRITORIAL TEACHERS ASSOCIATION OF HAWAII.

The Territorial Teachers Association of Hawaii has a long and creditable record and has been a potent factor in raising the ideals of service of the teaching profession of Hawaii.

The association consists of a central organization in Honolulu, with branch organizations upon each of the other islands. Any teacher of the public or private schools is eligible to membership. There are no dues nor fees. The officers consist of a president, vice president, and secretary, elected annually. The officers for 1910–11 were Mr. J. C. Davis, Miss Ida Ziegler, Mr. Vaughan MacCaughey, of the College of Hawaii. An advisory council, consisting of principals of the larger schools, assists in planning programs and other executive work of the association. Meetings are held monthly, usually in the auditorium of the McKinley High School.

The association expressed its approval of the following plan for industrial education in the Territory:

On each of the four islands, Kauai, Oahu, Maui, and Hawaii, schools shall be established contiguous to important centers of industry. These schools shall give training in agriculture, home economics, trades, and industries. Instruction shall be given in field, garden, kitchen, and shop and shall be of such practical nature as to enable the pupils at the end of the course to take up work in the respective industries at remunerative wages.

The type school for such a system is as follows: A school shall be established in a given locality when 25 students can be assured. The attendance of all boys and girls between the ages of 14 and 18, both inclusive, who are not otherwise wisely and profitably employed, shall be required. The equipment of the school shall consist of a farm of not less than 25 acres, which shall be increased in proportion to the number of boys attending, at the rate of 2½ acres per boy; all essential hand tools; a shop equipment to meet the needs of the industries of the neighborhood, and residence buildings provided with sanitary and culinary equipment for properly housing and feeding the pupils. Students shall be remunerated for their work in accordance with current value, to be determined by some schedule based upon time, piecework, or profit sharing. Students shall work the first two years on the farm or in the shops of the school. During the last two years one half of each day shall be given to the fields or shops of the industry of the locality, and the remainder to the study of related academic subjects, including mathematics, geography, reading, and writing, etc. The department of public instruction shall engage and pay all instructors. The industry shall supply lands, buildings, and equipments and pay the students for work in fields, shops, etc. The school shall cultivate the land set apart by the industry and pay the pupils out of the proceeds of the crop.

III. UNIVERSITIES AND COLLEGES.

ANNIVERSARIES OF UNIVERSITIES AND COLLEGES.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

The fiftieth anniversary of the granting of the charter of the Massachusetts Institute of Technology was celebrated on April 10, 1911. As a fitting memorial of the occasion a congress of technology was arranged. President R. C. Maclaurin announced the gift of a member of the class of '93, who had purchased and presented to the institute about 1,000 acres of land in Maine to be used for the summer school of civil engineering. On the afternoon of April 10, President Maclaurin delivered an address on "Some factors in the institute's success." He emphasized the fact that—

> there has never been any uncertainty or indefiniteness as to what the institute is aiming at in its scheme of education. Every serious student of education is struck by the fact that so many schools and colleges drift around, apparently without compass or rudder, with no definite idea as to what port they are trying to reach, or how they should go to reach it. Here, at any rate, is an institution that, from the very outset, has had very definite ideas on these matters, whether those ideas be right or wrong.

He sketched briefly the career of President William B. Rogers, who, in his first address to the students, spoke of the value and the dignity of the practical professions for which they were to prepare themselves. President Maclaurin's address was followed by a paper on "The spirit of alchemy in modern industry," by Dr. William H. Walker, director of the research laboratory of applied chemistry; and by one on "Technology and the public health," by Prof. C. E. A. Winslow, associate professor of biology, College of the City of New York.

The papers delivered on the second day of the congress were divided as follows: Section A—Scientific investigation and control of industrial processes, under the direction of Prof. William H. Walker, chairman; Section B—Technological education in its relations to industrial development, in charge of Dr. A. A. Noyes, chairman; Section C—Administration and management, in charge of Dr. Davis R. Dewey, chairman; Section D—Recent industrial development, in charge of Prof. D. C. Jackson, chairman; Section E—Public health and sanitation, in charge of Prof. W. T. Sedgwick, chairman; Section F—Architecture, in charge of Prof. F. W. Chandler, chairman.

Prof. C. F. Park had general supervision of the congress.

UNIVERSITY OF WYOMING.

The twenty-fifth anniversary of the University of Wyoming was held June 10–15, 1911. Among other features was the presentation of an alumni play, written and performed by alumni, entitled "The Promised Land." It was a portrayal of several phases of Wyoming and university life.

VASSAR COLLEGE.

The fiftieth anniversary of the founding of Vassar College was celebrated April 28–29, 1911. President Taylor delivered an address of welcome to the visiting delegates. An interesting feature of the exercises was a pageant representing women of culture in five ages. Among the speakers were Miss Julia Lovejoy, for the students' association; Mrs. Mary King Babbitt, for the alumnæ; Prof. Laura J. Wylie, for the faculty; and President Taylor, who discussed "The Founder and the College."

INAUGURATION OF UNIVERSITY PRESIDENTS.

UNIVERSITY OF VERMONT.

The first of a series of inaugurations which marked the opening of the fall session of the scholastic year 1911–12 was that of Guy Potter Benton, A. M., D. D., LL. D., as president of the University of Vermont. The inaugural ceremony, which occurred October 6, had been preceded by an educational conference at the university, and many members of the conference remained for the inauguration. The ceremony drew together a large concourse of special delegates from the principal colleges and universities of this country and Canada, including the presidents of no less than 15 institutions. The keys and seal of the university were delivered to the new president by Mr. Darwin P. Kingsley, on behalf of the university's board of trustees. Mr. Kingsley briefly reviewed the history of the institution from the inception of the idea in 1777 to its realization in 1800, and the administrations which have preceded that of Dr. Benton, who is the twelfth president of the university. He recalled in particular the presidency of Dr. James B. Angell from 1866 to 1871, the large statesmanship of Justin S. Morrill, a firm friend of the institution, and the unsurpassed service of Dr. Matthew H. Buckham, whose recent death ended an administration covering more than a quarter of a century.

The subject of President Benton's address was "Education and the State," and his discussion indicated that liberal conception of this relation natural to one long identified with educational movements in the Middle West. Dr. Benton came to his present position from Miami University, Oxford, Ohio, which he had administered with marked success since 1902.

A large number of honorary degrees were conferred in connection with the inaugural exercises, among the recipients being, in addition to a number of college presidents and eminent professors, Dr. Harvey W. Wiley, Chief of the Bureau of Chemistry of the United States Department of Agriculture; Gov. John A. Mead, of Vermont; and Dr. A. E. Winship, editor of the Journal of Education.

UNIVERSITY OF MINNESOTA.

The inauguration of George Edgar Vincent, Ph. D., LL. D., as president of the University of Minnesota, took place on October 18, 1911. The chief addresses were devoted to "The leading ideas of higher education—culture, vocation, research, and service—and were delivered by Presidents A. R. Hill, J. H. Finley, H. P. Judson, and C. R. Van Hise.

The inaugural address of President Vincent laid great stress on cooperation, organization, and team play as the keynotes for the coming years of the university, whose campus must be as wide as the boundaries of the State, and whose one great aim must be "to find exceptional men and women, to train them for service, to fit them for leadership, to fill them with zeal for truth and justice."

An impressive feature of the ceremonies, notable for the rare combination of dignity and enthusiasm, was the participation of the two preceding presidents, William W. Folwell and Cyrus Northrop, the former speaking for the faculty and the latter presenting the new president for installation.

BOSTON UNIVERSITY.

The third president of Boston University, Lemuel Herbert Murlin, D. D., LL. D., formerly president of Baker University, Baldwin, Kans., was inaugurated with elaborate ceremony October 26 in the presence of a large concourse of people, including chosen delegates from above 100 American and foreign universities and colleges and from many learned societies. Ex-Gov. Bates, of Massachusetts, who, as president of the university corporation, presented its seal and charter to the incoming president, emphasized in his address the distinguishing characteristics of this institution, its progressive and cosmopolitan spirit and deep religious motive, which pass as a sacred trust to the new administration.

The subject of President Murlin's inaugural address was "The university and the city," and its central idea was that of university leadership in the problem of our civilization, which, in the opinion of the speaker, "is the problem of the city." The significance of this idea was emphasized by the presence and participation in the exercises of representatives of all the municipal activities of Boston pertaining to education.

NEW YORK UNIVERSITY.

The public installation of Elmer Ellsworth Brown, LL. D., former United States Commissioner of Education, as the seventh chancellor of New York University, occurred November 9, 1911, in the presence of a distinguished gathering of college men. There were present about 150 delegates, representing colleges, universities, and educational institutions throughout this country and Europe.

Among the more important addresses delivered during the day were the following: On behalf of the corporation, Hon. Eugene Stevenson, vice president of the council; inaugural, Dr. Elmer Ellsworth Brown, chancellor; congratulatory, Dr. Henry M. MacCracken, chancellor-emeritus; for the alumni, Dr. Henry Bond Eliot, senior alumnus, a graduate of the class of 1840.

Responses were made by delegates as follows: For New York, Dr. Andrew S. Draper, State commissioner of education; for the city of New York, Hon. William J. Gaynor, mayor; for educational foundations, Dr. Elihu Root, trustee of the Carnegie Institution, senior United States Senator from New York; for American universities, Dr. Harry Pratt Judson, president of the University of Chicago; Dr. Edmund J. James, president of the University of Illinois; Dr. Mary E. Woolley, president of Mount Holyoke College; and Dr. James H. Kirkland, chancellor of Vanderbilt University; for foreign universities, Dr. James Bryce, British ambassador, honorary fellow Oriel and Trinity Colleges, University of Oxford; Dr. Andrew Carnegie, lord rector of the University of Aberdeen; and Dr. William R. Riddell, justice of the King's bench, member of the senate of the University of Toronto.

In his address Chancellor Brown emphasized the intimate relation existing between the work of the New York University and the social, civic, industrial, professional, and cultural life of the city of New York, but claimed for the university in addition that broader contact with the world which it has constantly enjoyed. He expressed an earnest desire to cooperate in every helpful way with the authorities of Columbia University and the College of the City of New York in advancing the cause of sound education both in the city and the nation.

At a banquet at the Astor Hotel in the evening toasts were proposed by Rev. George Alexander, and responses were given by Dr. Paul H. Hanus for Harvard, President Arthur T. Hadley for Yale, Dr. William F. Magie for Princeton, President Nicholas Murray Butler for Columbia, and President Jacob G. Schurman for Cornell. Telegrams of congratulation were read from President Taft and from Dr. P. P. Claxton, United States Commissioner of Education.

WEST VIRGINIA UNIVERSITY.

Dr. Thomas Edward Hodges was inaugurated as eighth president of West Virginia University November 3, 1911. The occasion was especially noteworthy on account of the presence of the President of the United States. Addresses were made by President Alderman, of the University of Virginia; President Judson, of Chicago University; President Thompson, of Ohio State University; President Hodges, of West Virginia University; and Dr. Fletcher B. Dresslar, of the United States Bureau of Education. The subject emphasized most by the speakers was that of making the university of practical use to the State. Delegates were present from 50 educational institutions.

THE INAUGURATION AT WELLESLEY COLLEGE.

The inauguration of Miss Ellen Fitz Pendleton as the sixth president of Wellesley College was celebrated October 16 with impressive ceremony and in the presence of a notable company of educators and public officials. The invocation was pronounced by Rev. William Lawrence, Episcopal bishop of Massachusetts and vice president of the college. Dr. Samuel B. Capen, president of the board of trustees, and Mrs. Pauline A. Durant, the surviving founder of the college, took part in the installation ceremony. Brief addresses on educational topics were made by President Lowell of Harvard, President Faunce of Brown, President Taylor of Vassar, and President King of Oberlin. President Faunce, whose subject was the origin and growth of colleges for women, recalling that President Pendleton was a native of Rhode Island, said, "Our State has never boasted of its size; but we are quite large enough to furnish Massachusetts with one president of Mount Holyoke College and two presidents of Wellesley College within a dozen years."

President Pendleton is a graduate of the college over which she is now called to preside, and has already served it as professor, dean, and acting president, and is therefore fully possessed of its traditions and spirit. The subject of her inaugural address was the twofold function of a college—the training for citizenship, and the preparation of the scholar. It was noticeable that among the essential factors in such training she emphasized the claims of her own specialty, mathematics, as regards both its disciplinary and cultural effects.

A picturesque feature of the day's events was the presentation of the delegates to President Pendleton by roll call, the delegates, over 90 in number, being duly summoned in order of the founding of each institution represented.

The brilliant social features of the occasion were completed by a reunion of the alumnæ.

ASSOCIATION OF AMERICAN UNIVERSITIES.

The twelfth annual conference of the Association of American Universities was held at the University of Virginia November 10–11, 1910. Dr. William L. Bryan, of Indiana University, presented a paper on "Combined courses in academic and professional work," in which he declared—

(1) The combined arts-professional courses are to be judged in comparison with other courses now offered in standard colleges of liberal arts; (2) the various types of combined course are attempts to hit the difficult mean between too early and too late entrance upon professional studies. There is substantial danger in both directions.

Dr. Calvin Thomas, of Columbia University, read a paper on "The degree of master of arts." Among other things, he said:

The master's degree is not conferred exclusively by universities that are worthy of the name and can be trusted to maintain a high standard under a régime of perfect liberty. It is also conferred by a host of institutions which are not properly equipped for graduate work of a high grade, but would like to be thought thus equipped. As for the bachelor's degree, it can now be had from all sorts of institutions, some of which are virtually high schools. If, then, in the country at large, we are to have no standard at all for the master's degree, if it is to betoken nothing more definite than a year's study following a bachelor's degree, there is reason to fear that the second degree may gradually lose such prestige as it has now acquired at the better institutions and become a sort of academic joke. On the other hand, it is at least possible, and it seems reasonable to hope, that if our leading universities, as here represented, were to unite in a well-considered effort to give the degree a more definite significance their influence might gradually prevail over weaker competitors and ultimately establish the degree on a firm basis of public regard and public utility.

President Charles R. Van Hise, of the University of Wisconsin, spoke on the subject of "The appointment and tenure of university professors." Dr. Van Hise emphasized the fact that a difference must necessarily exist in methods employed in the western State universities and in the older endowed universities of the East.

ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE SOUTHERN STATES.

The sixteenth annual meeting of the Association of Colleges and Preparatory Schools of the Southern States was held at Athens, Ga., November 3–4, 1910. Prof. R. E. Blackwell, of Randolph-Macon College, Virginia, delivered the presidential address, taking as his theme "The necessity for conservation of educational energy in the South." He said:

We need libraries, laboratories, high-priced teachers, and twice as many of them as formerly, whereas a comparatively short time ago neither libraries nor laboratories made any demands on the treasuries of our colleges. Now, under the hampering conditions in the South, how are we going to make schools that measure up to the standard set by the wealthier portions of our country? It is only by the greatest economy of means that we can do it. We must conserve every ounce of educational energy. There must be no unnecessary duplication of instrumentalities, and no waste.

Looking at the situation in the South, what do we find? No well-articulated system of education—universities, colleges, and high schools all competing for the same grade of student. No university well enough equipped to do genuine research work, and twice as many professional and polytechnic schools as are needed, and none of them able to give our people the advantages that northern and western institutions offer. When we think of the heavy handicap of the South, it is simply disheartening to contemplate our situation.

Fortunately our people are beginning to be aroused to the actual state of affairs; public sentiment is being molded so that those in authority are coming to see the necessity of some improvement. What we need is to get clearly before our minds that the money that we have is not for the purpose of supporting institutions of learning, but for the education of our young people. Loyalty to our children comes first; the good of individual institutions must be subordinated to the good of those who are to be taught.

The first thing to be done is to complete the work of this association—to make a hard-and-fast line between high school and college so that there shall be no overlapping here. This would seem to be not so difficult a task, and yet those who have been wrestling with it know how much yet has to be done. Strange to say, the State schools are among the most conspicuous sinners in this matter of educational overlapping and waste of energy. The State is building up high schools with one hand and with the other is appropriating money to institutions of college grade which devote much of that money to teaching high-school subjects, having induced students to leave the high school by offering them the liberty and the attractions of college life.

Papers were read by Dr. W. D. Weatherford, Dr. R. H. Whitehead, and Dr. N. P. Colwell also.

The report of the committee on uniform entrance examinations, appointed at the preceding meeting of the association, was submitted.

The subject of the "Administration of the system of admission to college by certificate" was discussed at length, and a committee was appointed to consider the question of the certificating system and its administration, and to "suggest desirable safeguards for use by colleges, prepare blanks, and consider the advisability of establishing a permanent commission or board as a part of the organization of this association, and include in the scope of its inquiry and recommendations such further matters as it may deem wise."

ASSOCIATION OF COLLEGIATE ALUMNÆ.

The twenty-ninth annual meeting was held October 19–22 at Denver, Colo.

The committee, appointed to make out a list of approved foreign universities whose advanced nonprofessional degrees shall be accepted for membership in the association, reported that it was unable to formulate any fixed standards for the admission of such institutions.

The committee limited its task in two directions: First, it considered "only universities which already grant degrees to women, except in the case of Germany, where the regulations in regard to women are frequently changed"; and second, it considered the universities of particular countries only—France, Switzerland, Germany, Great

Britain, Ireland, Canada, Scandinavia, Belgium, and Holland. The committee reported that it felt "quite incompetent to deal with the universities of the Latin countries, or of Russia, or of the Orient. Austria offers almost no privileges to women. The only countries on the list which offer an advanced nonprofessional degree other than the doctorate are Great Britain, Ireland, Canada, and France."

The officers of the association for 1910–11 are: President, Miss Laura Drake Gill, 264 Boylston Street, Boston, Mass.; secretary, Mrs. Philip N. Moore, 3125 Lafayette Avenue, St. Louis, Mo.

NATIONAL ASSOCIATION OF STATE UNIVERSITIES.

The fifteenth annual meeting of the association was held in Washington, D. C., November 14, 1910. Dr. Brown Ayres, president of the University of Tennessee, delivered the presidential address. Speaking of extension work, he said:

> The idea has rapidly spread that a State university exists not solely as a teaching institution for the pupils within its walls, or even for its influence direct or remote on the schools of the State, but that its duty is to serve the State in all possible ways, whether in general or special education, in industries, in the investigation of economic problems, in the solution of the problems of public health, in the problems of the home, the town, or the city.

Dr. W. O. Thompson, president of Ohio State University, read a paper on "In what sense and to what extent is freedom of teaching in State colleges and universities expedient and permissible?" in which he stated that—

> the freedom of teaching in State colleges and universities is not only expedient and permissible, but a necessity if the university is to reach its highest service. Moreover, this freedom will be exercised upon all proper subjects of human inquiry.

Dr. Thomas F. Kane, of the University of Washington, delivered an address on "The maintenance of the college of liberal arts in a State university in competition with professional and technical colleges in the same institution." Among other things he said:

> This is peculiarly a materialistic and practical age. The demand for preparation for a vocation is strong. The college of liberal arts, to render its most effective service and to appeal to men in the midst of the other colleges, must connect with life. The bearing of its courses as the broad foundation for vocational training should be kept clear at many points. The relation may well be kept clear, for examples, of the work in English to a department of journalism or a literary career or to public speaking, of the work in economics to a department of commerce, of the work in geology to the department of mining, of the work in chemistry to industrial chemistry and pharmacy, of the work in botany and zoology to economic botany and zoology, of the work in mathematics to engineering, of the work in German, French, and Spanish to international diplomacy or foreign commerce, of the relation of history and political science to law and legislation, and the relation of the department of physics to electrical engineering. This relation of the arts work makes its appeal to men. It tends to give the college its proper place with strong students, as the central college of the univer-

sity. All the strong students, regardless of vocation, need the liberal-arts training as men. From the vocational standpoint they need the liberal-arts training as the broad foundation to prepare for the greatest ultimate growth in their vocation of which they are capable.

The definition of a "unit" adopted by the National Conference on Standards of Colleges and Secondary Schools was approved and adopted by the association. It is as follows:

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

The following explanation was appended by the committee on standards:

This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high-school course as a basis, and assumes that the length of the school year is from 36 to 40 weeks, that a period is from 40 to 60 minutes in length, and that the study is pursued for 4 or 5 periods a week; but under ordinary circumstances a satisfactory year's work in any subject can not be accomplished in less than 120 sixty-minute hours or their equivalent. Schools organized on any other than a four-year basis can, nevertheless, estimate their work in terms of this unit.

NATIONAL CONFERENCE COMMITTEE ON STANDARDS OF COLLEGES AND SECONDARY SCHOOLS.

The fifth annual meeting of this committee was held in New York City, January 28, 1911.

The following organizations were represented: National Association of State Universities, College Entrance Examination Board, New England College Entrance Certificate Board, Association of Colleges and Preparatory Schools of the Middle States and Maryland, North Central Association of Colleges and Secondary Schools, Association of Colleges and Preparatory Schools of the Southern States, Carnegie Foundation for the Advancement of Teaching, New England Association of Colleges and Preparatory Schools, the United States Bureau of Education.

Desirous of assisting in the establishment of "a uniform and convenient terminology," the committee had appointed a subcommittee to prepare for this conference data regarding the use of the terms "hour," "count," "unit," "period," "exercise," "point," etc., in secondary schools and colleges. Mr. Wilson Farrand, chairman of the subcommittee, reported the results of the investigation which had been made and embodied these results in the following resolution, which was unanimously adopted:

Resolved, That this committee recommends, as a matter of convenience and to secure uniformity:

1. That the term "unit" be used only as a measure of work done in secondary schools, and that the term "period" be used to denote a recitation (or equivalent exercise) in a secondary school.

2. That the term "hour" be restricted to use in measuring college work, and that the term "exercise" be used to denote a recitation, lecture, or laboratory period in a college.

3. That "unit" be used as defined by this committee, the Carnegie Foundation, and the College Entrance Examination Board, and that "hour" be used preferably in the sense of year-hour.

4. That the use of other terms, such as "count," "point," "credit," etc., in any of these senses be discontinued.

Following a discussion of the question of a combination of the examination and the certification methods of admission to college, Dean Ferry presented the following resolution, which was unanimously adopted:

Resolved, That this committee indorses the movement of various colleges in the direction of attaching weight to the school record of each candidate in connection with his entrance examination, and recommends to the colleges that such records be regularly used as an aid in determining the candidate's fitness for admission to college.

The question of the proper use of the term "honorable dismissal" was discussed and the secretary was requested to obtain further information on the subject and to report at the next meeting.

Various questions proposed for discussion were laid on the table and the subcommittee, consisting of Headmaster Wilson Farrand, of Newark Academy, Newark; Principal Bliss, of the University School of Detroit; President Henry S. Pritchett, of the Carnegie Foundation for the Advancement of Teaching; and Dean Frederick C. Ferry, of Williams College, was continued with a request that it report again at the next meeting.

NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS.

The sixteenth annual meeting of this association was held in Chicago, Ill., March 24–25, 1911. Prof. George W. Benton, of Indianapolis, Ind., delivered an address on "Some problems of secondary education," in which he called attention to four problems in organization and administration, as follows:

(1) The elective system must be extended to meet the more varied needs of the growing constituency of our secondary schools, but election must have a definite purpose and must be controlled by wise and thoughtful consideration of the needs of the individual. (2) It is the business of public education to do what it can to render efficient every individual, according to his peculiar abilities. To that end his time must be conserved, and he must be brought by the most direct route to the particular educational opportunity which will best utilize his powers and render them subservient to life's serious purposes. We must avoid trying to spoil a workman in the effort to make a scholar, or the reverse. (3) Colleges must either assist the secondary school in maintaining standards of efficiency, or they must liberalize their estimate of the quality of secondary work, and meet the product of these schools with broader opportunities for the cosmopolitan character of their individual tendencies. (4) There is an alarming and increasing lack of efficient teachers, especially men, for secondary schools. This is particularly true of men prepared for the newer lines of work. Colleges are not yet equipped to prepare these teachers, and if they were the

meager compensation of the teacher as against the larger expectation of commercial life offers small hope of relief. The only solution of this difficulty lies in the recognition of the high quality of the teacher's service, and in lifting that service from the plane of semiphilanthropy to that of a real profession.

The special committee appointed to investigate the marking system submitted a report. Among other things, a series of results was given—

showing how four different markers in a State department of education differed in their evaluation of exactly the same papers. When the papers examined were in history and reading the marks differed on an average from 7 to more than 8 per cent. In some cases the difference between two markers' judgments was as high as 20 per cent. This shows the ambiguity of percentage marks.

In summarizing the report the committee declared that it had endeavored to show that—

the thorough-going study of the marking system would be advantageous in clearing up the ambiguities which now exist in that system. It has aimed to show further that if this material could be collected in a proper way and in sufficient quantities, it could be used in comparing institutions with each other.

Principal Jesse B. Davis, of the Central High School, Grand Rapids, Mich., read a paper on "Vocational guidance, a function of the public school." He declared that—

much of the failure and disappointment in life and possibly much of the crime that exists is due to the fact that so large a proportion of our youth go out from our public schools with but little special preparation for the work which they find themselves compelled to enter in order to live, and with no definite aim or ambition dominating their lives. On all sides do we find men who are the slaves of uncongenial labor, struggling to make out a meager living in an occupation for which they were never intended. The number of men and women who can truthfully be called successful in life form a very small proportion of the population of our country. Among those who in old age have counted themselves successful are many who did not find their life work until they were past middle life.

Going out from our public schools to-day is a vast army of boys and girls, several million strong, who will never finish the free education that is offered them, but who will enter the field of unskilled labor. The desire to earn a few dollars in a position which has no possible future, leads them from their best opportunity to prepare for life's battles. Our annual tribute to the Cretan Minotaur of "Blind alley employments" is increasing from year to year.

SOUTHERN ASSOCIATION OF COLLEGE WOMEN.

The eighth annual convention of this association was held at Jacksonville, Fla., April 20–21, 1911. The report of the committee on standards of colleges for women contained statistics from five States—Maryland, Virginia, North Carolina, South Carolina, and Louisiana. Miss Elizabeth A. Colton, chairman of the committee, said:

In these tabulations I have tried to present the admission requirements of these institutions in terms of the standard unit for measuring secondary school work, and also to make an approximate estimate of the amount of college work, if any, done in each.

There are in the five States under consideration three of the four colleges for women which belong to the Association of Colleges and Preparatory Schools of the Southern

States: Goucher College (Woman's College of Baltimore), in Maryland; Randolph-Macon Woman's College, in Virginia; and Sophie Newcomb, in Louisiana. There are in these States, also, 7 other colleges which, according to their catalogue announcements, are now requiring the standard 14 entrance units, but which are not eligible to membership in the above association on account of their failure to comply with one or two important regulations—chiefly the one demanding that preparatory and collegiate departments be kept rigidly distinct in faculty, in students, and in discipline. Three of these are in Maryland—Mount St. Agnes College, Notre Dame of Maryland, and the Woman's College of Frederick; 2 in Virginia—Hollins and Sweet Briar; 1 in North Carolina—Meredith College; and 1 in South Carolina—Converse. There are 3 others—Salem College and Greensboro Female College in North Carolina, and the College for Women in South Carolina—which require 12 units. But in addition to the 3 southern association colleges mentioned above and the 10 which seem to have more or less claim to recognition, there are in these 5 States 30 other institutes, seminaries, and colleges for girls which confer the degree of bachelor of arts; in other words, we have 42 degree-conferring women's colleges in just one-third of the Southern States—more than seven times as many as in the whole of New England.

When we complete our investigation of colleges for women in the South, we are planning to publish our statistics with a view that such information may help colleges to state clearly in their catalogues just what they are capable of doing thoroughly. It is to be hoped that this data will not encourage any institution to attempt the impossible, but that it will discourage any from claiming to be what it is not. And in order that all colleges may have a common standard of comparison, we have presented to the committee on resolutions the following recommendations:

(1) That the Southern Association of College Women request all institutions belonging to the Carnegie Foundation for the Advancement of Teaching either to designate their admission requirements in standard units, or if they use some other terminology in all cases to give the equivalent in standard units. A number of colleges on the accepted list of the Carnegie Foundation state in their catalogues that they require 3 "points" in mathematics; but fail to say that these 3 points are equivalent to only 2.5 units. And since all their other "points" correspond exactly to the standard unit, several southern colleges interpret these 3 *points* in mathematics as 3 *units*.

(2) That the Southern Association of College Women request all southern colleges for women that confer degrees to state their admission requirements in standard units. Since degree-conferring institutions for women in the South vary in standard from poor preparatory schools to colleges of recognized standard, it is desirable that some distinct basis of comparison be established. The majority of southern "colleges" do not state definitely either the amount of work required in a subject or the length of time a subject must be pursued before a candidate is admitted to the freshman class.

(3) That the Southern Association of College Women request all organizations to use the term "unit" only when it is of standard value. The Virginia Association of Colleges and Schools for Girls designates a unit as "one year's work with daily class meetings for a time not less than 30 minutes." A Virginia unit is, therefore, equivalent only to 0.6 or 0.7 of a standard unit.

(4) That the Southern Association of College Women request all State high-school inspectors in the South in their reports of the work done in the public high schools to give credit in units only to subjects recognized either by the Association of Colleges and Preparatory Schools of the Southern States or by the College Entrance Examination Board. Some high-school inspectors count arithmetic as a high-school subject, and give it a credit of one unit in a high-school curriculum; and some give four units credit to preparatory work in English, which is counted as three units by the Association of Colleges of the Southern States.

ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

The twenty-fourth annual convention of the association was held at Washington, D. C., November 16–18, 1910.

The report of the committee on graduate study dealt chiefly with the graduate school of agriculture held at the Iowa State College July 4–29, 1910. The committee recommended that the fifth graduate school be held in 1912. In the opinion of the committee—

> the graduate school by stimulating advanced study will make it necessary for the agricultural colleges to differentiate more clearly between undergraduate and postgraduate work, and to provide more adequately for the latter.

Commissioner Elmer Ellsworth Brown, Dr. Kendric C. Babcock, and Mr. A. C. Monahan, of the United States Bureau of Education, discussed the character of the new work of the bureau in the domain of higher education, especially as related to the land-grant colleges. The cooperation of the association was requested in this undertaking. A resolution approving the projected work of the United States Bureau of Education was adopted by the convention.

The committee on extension work submitted a report, which was devoted to a discussion of—

> the problems confronting extension work in agricultural colleges, notably those dealing with the need of largely increased funds for the purpose and the source from which these should be derived, definitions and nomenclature relating to extension work, the types of work to be undertaken, the forms of administrative organization, the training requisite for workers, and the problem of social leadership.

Regarding the method of organization, the committee favored in general—

> the plan whereby the work is performed by a director or superintendent of extension work, responsible directly to the head of the agricultural work of the institution, and a corps of workers made up in part of men giving practically all their time to extension teaching and in part of the regular college and station staff.

The following officers were chosen for the ensuing year: President, W. H. Jordan, of New York; secretary treasurer, J. L. Hill, of Vermont.

EXCHANGE OF INSTRUCTORS.

In accordance with a tentative plan of exchanges, announcement is made that Dr. Albert Bushnell Hart, professor of the science of government, Harvard University, will divide one-half of the academic year 1911–12 between Colorado College, Colorado Springs, Colo.; Grinnell College, Grinnell, Iowa; Knox College, Galesburg, Ill.; and Beloit College, Beloit, Wis.

In return each one of the four colleges above mentioned will send to Harvard for one-half year one of their young instructors to devote one-third of his time to teaching in some Harvard course. The remaining time he may devote to graduate and research work, as he

sees fit. Prof. E. C. Hills has been designated by Colorado College as the first return instructor. He will give instruction in Spanish literature at Harvard.

IV. PROFESSIONAL EDUCATION.

ASSOCIATION OF AMERICAN LAW SCHOOLS.

The eleventh annual meeting of the Association of American Law Schools was held at Boston, Mass., August 28–29, 1911. Prof. William R. Vance, of Yale University, delivered the presidential address, taking as his theme, "The ultimate function of the teacher of law." In the main the address was a discussion of the law teacher as an efficient agency in bringing about "the wise, comprehensive, and prompt adaptation of our law and procedure to the new and changing needs of society." Prof. Harlan F. Stone, dean of the Columbia University law school, read a paper on "The function of the American university law school." He called attention to the fact that of "the 81 college or university law schools in the United States, 25, or nearly one-third, maintain a two-year course, and of these 9 maintain evening schools only. In the case of a very large percentage of college or university law schools, it requires only a slight knowledge of their curricula to know that their university relationship is more nominal than real, so far as any influence is exerted on their scholarship." Prof. Stone further asserted that "an even larger percentage serve no educational purpose beyond the preparation of their students for the bar examinations, which in many of their respective States are notoriously lax and insufficient." He advocated fewer law schools and higher standards of legal education. Baron Uchida, Japanese ambassador to the United States, read a paper on "The teaching of jurisprudence in Japan."

AMERICAN BAR ASSOCIATION—SECTION OF LEGAL EDUCATION.

The section of legal education of the American Bar Association met at Boston, August 30–31, 1911. Mr. John B. Sanborn, of Wisconsin, read a paper on "The advisability of a law school training as a prerequisite for admission to the bar." Among other things, he said:

> The office is the place to learn practice. A trial in a justice court gives a much better training in the practice of law than does the best moot court ever organized. The student court can in no proper sense be compared to the medical clinic. I have become firmly convinced that the law school which tries to give instruction in the art as well as the science of practice, which leaves the fundamental principles which underlie all practice and attempts to follow the shifting codes and practice acts of various States, is wasting the time both of its faculty and its students. This should frankly be left to the office.

Mr. Frederic R. Coudert, of New York City, delivered an address on "The crisis of the law and professional incompetency."

He deplored the fact that the admission of "a large number of unlearned, unlettered and utterly untrained young lawyers, with no esprit de corps and little regard for the traditions of the profession, has been having and will continue to have a deleterious effect upon the administration of justice." Mr. Andrew A. Bruce, of North Dakota, read a paper on "The true mission of State boards of bar examiners and their opportunity in legal education," which was followed by an animated discussion.

AMERICAN MEDICAL ASSOCIATION.

The sixty-second annual session of the American Medical Association was held at Los Angeles, Cal., June 26–30, 1911. The report of the council on health and public instruction, including all the subcommittees of the council, was an important feature of the session. The organization work of the council has been in charge of Dr. J. N. McCormack. During the year Dr. McCormack has held meetings and delivered public addresses in 97 cities in 11 States. The report says:

> The public is eager to be enlightened on sanitary and public-health matters and is showing increased appreciation of the efforts of the association in this direction. The council is considering the advisability of putting a number of speakers in the field, as the work to be done is far too great for the strength of one man.

The following officers were elected for the ensuing year: Dr. Abraham Jacobi, New York City, president; Dr. Alexander R. Craig, Chicago, Ill., secretary.

COUNCIL ON MEDICAL EDUCATION.

Dr. Arthur D. Bevan, chairman, presented the report of the council on medical education and legislation. The seventh annual conference of the council was held in Chicago, Ill., March 1–3, 1911. Dr. Bevan recommended a simplification of the materia medica examinations. Speaking of the American standard of medical education, he said:

> Those of us who are familiar with the situation believe that modern medical education needs a training in a good secondary school; a premedical course in the sciences of physics, chemistry, and biology; a thorough four-year course in a medical school; and, lastly, a practical year as an interne in a hospital. I think we all agree on that as a minimum training necessary to prepare a student for independent practice. That would mean essentially a minimum of six years of training from a high school. While it is evident that such a requirement could not at once be put in force throughout the whole country, nevertheless I state without any hesitation that anything short of that as the ultimate requirement appears to me to be insufficient.

Dr. N. P. Colwell read an elaborate paper on "Progress and needs in medical education," which was well illustrated with graphic statistics. He said:

Changes for the better in medical education have been particularly rapid since 1904, when the Council on Medical Education was organized. Up to that year the number of medical colleges, mostly of the proprietary variety, continued to increase, regardless of the frequently published references to the overcrowded condition of the profession and regardless of reports frequently presented showing the need of better rather than a larger number of medical colleges. Since 1904 there has been at first a gradual and then a positive decrease in the number of colleges, until now the number has been reduced to 129. It is significant to note that the positive decline has been since 1907, when the classification of medical colleges, based on the council's first actual inspection of all the medical colleges of the United States, was read at the third annual conference. Of the 44 colleges closed since 1907, 20 colleges were closed outright and 24 by merging with others.

Dr. Colwell advocated the manifest advantages of the examinations held by the College Entrance Examination Board.

Papers were also read by Dr. T. S. Fiske, Dr. E. P. Lyon, Dr. C. R. Bardeen, etc.

ASSOCIATION OF AMERICAN MEDICAL COLLEGES.

The twenty-first annual meeting of the association was held at Chicago, February 27–28, 1911. Dr. John A. Witherspoon, president, delivered an address on "Cooperation in establishing standards of medical education," in which he made the following suggestions:

(1) This association should adopt a uniform standard after consultation with all forces interested and enforce this standard by frequent inspections of members. (2) Inspections of both applicants and members should be placed in the hands of the judicial council or a committee appointed for that purpose; at least two men should be required for the inspection of any school, and the report should be in writing for future reference. (3) The interests of the association demand that the work be divided up so as to utilize as many men and their influence as possible, if we would broaden our field of usefulness in both higher educational and moral or ethical standing sufficiently to make membership an honor so distinctive that all good schools will desire the connection. (4) At present the four-year high school, or the 14 units for entrance and a four-year strictly graded course of study of 4,000 hours, is as high as the conditions of education will permit. (5) If an additional year is wise, then a fifth year, following the present four-year plan, which shall be strictly practical and bedside in hospital wards, is preferable, and this association should insist that a hospital controlled by the college is essential to thorough training.

The secretary-treasurer reported that 46 colleges are now in membership in the association. The committee on pedagogics, Dr. George H. Hoxie, chairman, submitted a report, in which appeared the following statement regarding the "unit of credit:"

We believe that the average student can not work profitably either in class or by himself more than 12 hours a day for 5 days in the week, or if we deprive him of the Saturday holiday, for 10 hours for 6 days in the week; that is, we regard 60 hours a week as the optimum number of hours for medical students under average conditions. This, for 32 weeks of actual teaching, means 1,920 hours, or for a gross number of 36 weeks, 2,160 hours.

In order to establish a ratio between class work and home study, we have sent out a circular to all of the leading colleges of the country. To this we have received 40 replies. Of these 40 institutions, 18 have not established a definite ratio, 14 call for

2 hours of preparation for a recitation or lecture, and 1 hour for a 2-hour laboratory or clinic exercise, and 7 have only 1 hour for the first and about one-half hour for the second. In other words, of the 22 institutions that have established a ratio, the great majority look on 3 hours as the unit of time allowance for each class exercise. Should we interpret our association curriculum of 1,000 hours as equally divided between lecture or recitation and laboratory or clinic exercise, we must calculate that it calls for a total of 2,500 hours each year—a figure which in the light of the reports made on our schools during the past two years seems rarely attained.

For this reason your committee is of the opinion that the work of our schools would be more efficient if each faculty would establish the ratio we suggest and then hold the instructors and students up to a standard of work justifying the three-hour unit mentioned above.

Your committee believe, furthermore, that in the adoption of the new curriculum the value of the unit should be determined; and we respectfully recommend that the ratio be stated definitely as that of two hours of preparation or after-reading to each hour of recitation or lecture, and one hour of preparation or after-reading to each two hours of laboratory or clinic teaching. In other words, we believe that it would be of distinct advantage to credit work by units instead of hours—each unit representing a period of three hours; and that our school announcements should definitely state how these hours are to be subdivided in each course. Unless our school announcements contain such definitions, some of us will be credited with the intention to deceive even though guiltless of such an intention—for even now there is, as we have seen, great disparity; and the tendency is for this inequality to grow worse rather than better.

Emphasis was laid on the fact that the simple imparting of information is not real teaching, but that the student must be led to acquire logical methods of thought and argument. It was pointed out that many medical instructors do not keep this purpose in mind, and even if they did, would not understand the principles of pedagogy sufficiently well to attain the desired result. The report suggested that "the regular faculty meetings be utilized for the discussion of these principles—best under the guidance of some professional teacher brought in for the occasion."

The report of the committee on medical education, Dr. William J. Means, chairman, was as follows:

In accordance with a resolution passed at the last meeting of the association your committee, after a thorough and full consideration of the question of preliminary education, prepared and submitted amendments to the constitution which were presented to each college 30 days previous to this meeting, making more definite the present high-school standard. We earnestly recommend that these amendments be passed.

THE FIVE YEARS' MEDICAL COURSE.

After considering the question of a five years' course, the committee does not deem it wise to present a schedule for your consideration. The present unsettled condition of medical legislation in the States of the Union, coupled with the uncertainties that exist among the colleges themselves, places the subject in that state of development and uncertainty that precludes the presentation of even a tentative schedule. The questions that confronted us were: (1) Shall the fifth year be a terminal one to the present four years' course limited to clinical training, or shall a part of the time be given to the study of medical sciences in the beginning of the course? (2) In the States where legislative enactments have advanced the requirements beyond a high-school standard no provision has been made as to whether the course shall be given

absolutely in a literary college or as a preliminary course in a medical college. The trend of legislation, however, has been toward the literary training rather than increasing the medical curriculum. The difficulties in the way are that but very few of the literary colleges are equipped to give a definite premedical course, and very few are willing to change their present curricula to accommodate the medical colleges. While, therefore, we do not deem it wise for the association to adopt any prescribed schedule for a five years' course, we believe colleges which are members of the association should urge on their graduates the necessity for a hospital year before entering practice, and that proper inducements should be offered them to take the course.

DENTAL FACULTIES ASSOCIATION OF AMERICAN UNIVERSITIES.

The third annual meeting of the association was held at Iowa City, Iowa, March 8, 1911. The committee on education recommended to the association that the minimum standard of four years' high-school education now required for admission to the schools of the association—

shall be as defined by the regents of the University of the State of New York, this to include one year of work in chemistry, the requirement in chemistry to take effect in 1912–13.

The attention of the committee has been called to the fact that the regents of the State of New York issue a special dental certificate on examination, but suggests that the scope of examination for the special certificate be further investigated before the schools of this association accept such certificates as covering the preliminary educational requirements.

Your committee has carefully considered the advisability of adopting a four-year curriculum, and as the result of its deliberations we deem it inexpedient at the present time to adopt an obligatory four-year curriculum. We, however, recommend the adoption of an elective fourth-year course, the association to prescribe what subjects are to be pursued in the fourth year.

With reference to standardizing the curricula of the schools of this association, we have been unable to formulate any definite plan to this end, but recommend that steps be taken to standardize the curricula of the schools, and we also recommend that this question be referred back to the educational committee, or a special committee appointed for the purpose, for further consideration.

As to the number of conditions which a matriculate may be allowed to carry on entrance to the schools of this association, we recommend that this be left to the discretion of the different schools.

The recommendation of the committee regarding "the extension of the graduate phase of instruction in lieu of adopting a four-year curriculum at the present time" was, on motion, adopted by the association.

The question of the investigation of educational institutions by the Carnegie Foundation for the Advancement of Teaching was discussed, and a resolution adopted inviting the Carnegie Foundation to make an investigation of the educational conditions in the dental schools holding membership in the association, such as was made of the medical schools of the United States.

V. RELIGIOUS AND ETHICAL EDUCATION.

RELIGIOUS EDUCATION ASSOCIATION.

The eighth general convention of the Religious Education Association met in Providence, R. I., February 14–16, 1911. The general theme of discussion was "Religious education and the American home."

The following declaration of principles was adopted at the meeting:

We declare it our aim not to rival or supplant any existing organizations, but to inspire all existing organizations and undertakings with the great ideal of character building as the goal of both education and religion.

We aim at cooperative and persistent study, at the conference and stimulating of leaders, the guidance and service of the people. Such work is more vital to this country to-day than ever before in its history. The moral awakening which has come to our land in recent years, the swift growth of social consciousness, the new sense of responsibility for childhood, these developments emphasize the need of moral and religious, as well as intellectual culture.

It is not enough to give young people the tools of civilization; we must give them the will to use those tools aright. We must develop not only eye and ear and hand; we must develop also affection and purpose and volition.

We affirm that while recent economic and industrial changes have deeply affected and disturbed American home life, there is in this fact no reason to despair, but rather for serious endeavor to reinterpret old ideals in terms of the new situation.

We affirm that the preservation of the purity and sanctity of the home is essential to the preservation of church and school and of civilization itself. We condemn all attacks upon the sacred institution of marriage, whether made consciously by restless and reckless writers, or unconsciously by those who use the home for merely selfish ends.

In the enduring affection and mutual sacrifice of the true home we see the best antidote to exaggerated individualism and social anarchy. We ask the aid of all who love their country in the great task of making the home not the minister of pleasure but the school of character.

We affirm the need of instruction in all churches and colleges as to the obligations of parenthood and the equal obligation of filial duty. To all clubs formed for purposes of general culture we recommend the study of children's rights and duties.

To all communities we suggest and urge persistent study of social and moral conditions in the homes of the people. The home must be set in its true place as the central agency in the making of men. All parents must be led to see themselves as primarily the educators of their children.

The conservation of the national health, physical and moral, depends absolutely upon the purity, fidelity, and discipline of the home. To the great work of preserving the purity, increasing the fidelity, and promoting the discipline of the American home we would devote ourselves for another year.

MORAL EDUCATION.

The conference on moral phases of public education, appointed early in 1910 by the council of the Religious Education Association, met in New York February 16–17, 1911. Its purpose as stated "is

not to further any preconceived propaganda, but to take account of existing conditions, and to consider whether any advance movements can now be agreed upon." Among other resolutions the conference voted that—

Direct moral instruction, varying in content according to conditions, systematic or otherwise according to personal preference be employed as a means of moral education, with the special object of developing the power and habit of moral thoughtfulness.

That courses in personal and social ethics and moral instruction and training form a prominent part in the curriculum of institutions for the training of teachers.

That we approve of the greatly increased emphasis in the teaching of the biological sciences laid upon personal and institutional hygiene and, in particular, upon sex-hygiene and eugenics.

That it is the sense of this conference that the Council of Religious Education be requested to call another such conference as soon as may seem advisable, and that at such conference the relation of the content of the curriculum to the practical life of the pupil receive special consideration.

Dr. Herman H. Horne, of New York University, was the chairman of the conference.

The council of the Religious Education Association met at Teachers College, Columbia University, New York City, February 16–17, 1910. Papers were read on "The moral phases of public education."

NATIONAL INSTITUTION FOR MORAL INSTRUCTION.

The moral education board completed its organization by incorporating on March 29, 1911, under the name of the National Institution for Moral Instruction.

The membership of the moral education board will be continued and enlarged as the advisory organization of this incorporated institution.

The national headquarters are at 507 North Charles Street, Baltimore, Md. The headquarters officials are: Dr. Milton Fairchild, director of instruction; Dr. Edward F. Buchner, chairman, executive committee, educational directors; and Mr. Charles H. Torsch, treasurer, chairman, finance directors.

The institution work is to be endowed when the funds can be accumulated to the extent of $500,000, and a faculty of seven experts is to be set to work preparing material for moral instruction. The distribution of material to schools will be at the expense of the schools, a small rental for lessons being charged.

Distribution centers have been established at Baltimore, Md., at the University of Tennessee, Knoxville, Tenn.; at the Principals' Protection Club, Chicago, Ill.; and at the University of California, Berkeley, Cal.

The plan for visual instruction in morals is as follows: Photographs of things that actually happen in real life are taken especially for moral instruction; lantern slides from these, 70 to 100 for each lesson,

are projected on a screen and thus enlarged to life size before audiences of pupils in the school assembly halls; carefully prepared instruction as to what is right and fine in conduct is given as an explanation of the photographs while the pupils are studying them upon the screen; personal discussion, based on the illustrated lessons, between teachers and pupils in classrooms, gives application and fixes the ideals permanently in mind.

The most important experiment of the year was made in the Chicago grammar schools. The stereopticon lesson "What I am going to do when I am grown up," was offered for use during April and May to the Chicago Principals' Protection Club. It was put through the entire system of grammar schools, the report being favorable. The aggregate audience for visual instruction in morals in various cities and towns of the United States for the past year was about 100,000 boys and girls.

If the endowment can be raised, an annual meeting of directors, with invited guests, will be held, at which papers on moral instruction will be presented and discussed. It is thought that an advance in the psychology of the moral life and in pedagogy of moral instruction and training is necessary before the schools can formulate an effective moral discipline.

YOUNG MEN'S CHRISTIAN ASSOCIATION.

The educational department of the Young Men's Christian Association, organized in 1894 by the international committee for the encouragement, promotion, and supervision of educational work among the different associations, reports gratifying progress during the year 1910–11. The annual report of the above-mentioned department, published in Educational Notes, September, 1911, says:

> The number of students increased during the 12 months from 52,247 to 61,850, or 9,603 men and boys, an increase of over 18 per cent, the largest in the history of the work. Tuition fees paid by these students advanced to $528,206 with an increase during the year of almost 22 per cent; total expenses multiplied by $100,000 and now amount to $773,303, an advance of about 17 per cent over the preceding year. The number of lectures and talks increased 1,704, or 26 per cent, with practically one-half million boys and men in attendance. The number of paid teachers has also grown to 2,549; and 22,169 men and boys are enrolled as club members, an increase of 25 per cent. That associations are committed, increasingly, to a better quality of work is indicated by an added interest and participation in the international examinations. During the year 4,536 examination papers were ordered by 137 associations, an increase of 26 per cent.

Much attention has been given to special forms of industrial training, also to vocational guidance. The work of teaching English to "New Americans" has advanced during the year, about 10,000 non-English-speaking men and boys having been enrolled as students.

VI. SPECIAL EDUCATIONAL ACTIVITIES.

NATIONAL CHILD LABOR CONFERENCE.

The seventh annual conference on child labor was held at Birmingham, Ala., March 9–12, 1911, under the auspices of the National Child Labor Committee. Judge N. B. Feagin, a member of the National Child Labor Committee, welcomed the conference, on behalf of the mayor of Birmingham. He said:

We deem your coming auspicious in that you will teach us not to sacrifice the child life of this community in a mad eagerness to coin wealth; that life—a well-ordered life—is more valuable than material wealth; that the child is father to the man; that an educated, well-trained child gives us an honorable manhood and a splendid womanhood—a nation's most valuable asset, its greatest honor and glory.

Dr. Samuel McCune Lindsay, vice chairman of the national committee, responded. He pointed out the fact that the first definitely constituted State child labor committee in this country was organized in Alabama. The agitation in Alabama spread to other Southern States. Virginia, North Carolina, South Carolina, Texas, and Arkansas, in addition to Alabama, passed their first child labor laws in 1903. Mr. Lindsay said:

Then came the fear on the part of the representatives of industry that the coming prosperity of the South would be checked by legislative interference. You found also that strong opposition to your efforts to secure effective legislation came from nonresident capitalists, so that you and Mr. Murphy and his coworkers in those first legislative struggles in the South soon realized that a national movement must be organized before each State could really secure the enactment of effective remedies.

This is the reason why the National Child Labor Committee was formed in New York, in 1904, and it was in answer to this appeal from the South that a most remarkable group of distinguished American citizens, representing all sections of the country, both political parties, the church—Catholic, Protestant, and Jewish—institutions of learning, captains of industry, the labor unions, and social workers united as such diverse elements never had united before in the support of any single cause in the United States. With this history fresh in mind, it is difficult to reconcile some recent misrepresentations of the work of the national committee by its natural enemies, the exploiters of childhood, who have tried to make it appear that it stood for a sectional attack upon southern industry, when in reality it stands as a nation-wide response to a sectional call for help which came in the first instance from the South but has been heard in every State in the Union.

Dr. Felix Adler, chairman of the national committee, delivered an address on "Child labor a menace to civilization." Hon. A. T. Stovall spoke on "Standards proposed by the United States commission on uniform laws." He said:

The uniform law will prevent shiftless, impecunious, and drifting parents from exploiting their children's labor; and the manufacturer from removing, or threatening to remove, to another State because of more favorable laws; and it will be easier of enforcement, because decisions of disputed questions in one State will be persuasive, if not a precedent, in another State.

The subject of uniform State legislation was first exploited by the American Bar Association some 30 years ago. The special committee of the association on "A uniform child-labor law," of which Mr. Stovall is a member, was appointed at the annual conference at Detroit, in August, 1909. Mr. Stovall said:

I desire to thank the National Child Labor Committee for the great assistance rendered in the preparation of the law we reported to the conference of commissioners on uniform State laws at its last annual meeting in Chattanooga, in August, 1910, which law will come before the conference for discussion and adoption at its next annual meeting in Boston in August, 1911.

Mr. Owen R. Lovejoy, general secretary of the National Child Labor Committee, presented a statement on behalf of the committee of seven years' work for the improvement of child labor conditions in America. The outline "Of achievements of the American people developing legislation to protect the working child" may be seen by the following schedules:

1. During seven years five States passed their first law upon this subject: Delaware, Florida, Georgia, Mississippi, Oklahoma, and the District of Columbia.

2. The eight-hour day has been established in Ohio, Illinois, Indiana, Nebraska, New York, Wisconsin, Colorado, Oklahoma, North Dakota, Kansas, and the District of Columbia.

3. Night work under 16 years has been made illegal in Alabama, California, Delaware, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Mississippi, Missouri, Nebraska, New Jersey, North Dakota, Oklahoma, Rhode Island, South Carolina, Vermont, Washington, and the District of Columbia.

4. A 14-year-age limit as the minimum for employment in industry has been established in the following States: California, Colorado, Delaware, Idaho, Iowa, Kentucky, Louisiana, Maine, Missouri, Nebraska, Pennsylvania, North Dakota, New Jersey, Tennessee, West Virginia, Rhode Island, Kansas, and the District of Columbia.

5. Departments of factory inspection have been established in Alabama, Colorado, Delaware, Kansas, Louisiana, Maryland, North Dakota, Oklahoma, South Carolina, Texas, Tennessee, Virginia, and the District of Columbia.

6. Methods of proving the age of children seeking employment have been provided in the following States: California, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Missouri, Nebraska, North Dakota, Oklahoma, Oregon, Pennsylvania, Rhode Island, Washington, Wisconsin, and the District of Columbia.

Meantime, compulsory education laws have been enacted or improved in a large number of States.

SERIOUS DEFECTS.

It might appear from this record that as much has been accomplished, the public could reasonably rest. We are apt to forget how large a country we have. There are still seven of our States which have not yet reached the 14-year-age limit, even for employment in factories. These States are: North Carolina, Maryland, Alabama, Florida, Georgia, Mississippi, and South Carolina.

Alabama, Florida, Maryland, North Carolina, North Dakota, Pennsylvania, South Carolina, and Virginia permit the employment of boys of 12 years in mines.

Children under 16 are still permitted to work at night in Arizona, Colorado, Connecticut, Delaware, Maine, Maryland, Montana, Nevada, New Hampshire, South Dakota, Tennessee, Utah, West Virginia, and Wyoming.

There are 35 States in the Union in which children under 16 years of age may work more than 8 hours a day. Recently there has been widespread complaint against

confinement of children in poorly ventilated schoolrooms, where they spend the day in physical inactivity. Rapid improvement is coming in our schools through open-air classrooms and the development of manual arts; so that the evil complained of is decreasing; but if confinement in a schoolroom is injurious, what shall be said of the factory, where frequently the labor of the child also compels physical inaction at the almost automatic machine? Under the most objectionable conditions, the child is confined in school 1,000 hours annually. In Massachusetts the factory child is confined 2,912 hours a year, and in New York, where the 8-hour day prevails, he is subjected to 2,496 hours' confinement. In Alabama a child of 12 years may legally work 3,120 hours a year, or more than three times as many hours as he can be confined in school in States having the 9 or 10 months' school year; while children of 14 years may be employed 78 hours a week or 4,056 hours a year. The total number of hours of daylight in the year, exclusive of Sundays, is 3,744; so that the manufacturing industries of this State may legally employ their 14-year-old children 312 hours of the night besides all the hours of daylight.

In 23 of our States there is up to the present time no method of determining how old the children are who seek work in our industries. Our agents have frequently found 8, 9, and 10 year old boys applying for work in glass factories or coal mines, upon affidavits certifying them to be 14 or 16 years of age. In all these efforts at reform we must keep in mind the honor and dignity of our social institutions, and nothing is more fatal to the integrity of the American people than contempt for its own laws. When, by the very nature of the problem we lay upon the ignorant, impoverished, or greedy parent the temptation to deceive in order to secure employment for a child, we are guilty of placing the burden on the weak, where it does not belong, and promoting perjury by process of law.

The States in which we do not require any proof of the child's age, or at least any proof worthy the name, are Colorado, Florida, Louisiana, Nevada, South Dakota, Texas, Utah, Vermont, Virginia, Wyoming, Alabama, Arkansas, Delaware, Georgia, Idaho, Indiana, Missouri, Mississippi, New Hampshire, North Carolina, South Carolina, and Tennessee.

It is necessary that the laws to which we have referred shall be in charge of public officials clothed with adequate authority to enforce them. At present Arkansas, Florida, Georgia, Nevada, North Carolina, Utah, and Wyoming have no department intrusted with this duty, while the factory inspector in Missouri has jurisdiction only in the large cities, and the factory inspector in Louisiana only in the parish of Orleans; the factory inspector in Alabama is also required to visit and report on jails and almshouses; and the governor of South Carolina has within two weeks vetoed the appropriation made by the legislature for the two factory inspectors who, during the past two years, have assisted the commissioner of labor in laying the foundation of this branch of public service.

It will be recognized from the foregoing tables that the problem of bringing the States of this Union up to a reasonable standard of child protection is complicated and difficult. It will be seen also that the lower standards as to age, hours of labor, and methods of enforcing the law are, with few exceptions, much inferior in the South to the standards attained in Northern and Western States. And while we of the North, with shame, confess that the extent of child labor in our great industrial communities overshadows child labor of the South, the phenomenal industrial development in many of your southern sections indicates that the time is near at hand when the South will rival the older industrial communities in the extent of manufacturing and commercial operations, and that unless the South speedily improves the laws now upon her statute books the curse of child labor will rest more heavily upon her communities than upon others.

The reports of the general secretary and the southern secretary showed progress all along the line. Stress was laid on the fact that States and communities of the United States are woefully lacking in measures for collecting information concerning child welfare, as a basis for the extension and improvement of legislation for children. England and Germany are far ahead of us in this regard.

Among the speakers at the conference was ex-President Roosevelt, who dwelt forcibly on the right of the State to interfere on behalf of the child, and advocated the abolition of night work for children. He favored the establishment of a Federal children's bureau by the National Government for the collection and dissemination of data regarding the welfare of children.

A resolution was adopted indorsing the bill pending in the Legislature of Alabama making an amendment to the present child-labor law as recommended by the governor.

CHILD-WELFARE EXHIBIT OF NEW YORK.

The Child-Welfare Exhibit, the first of its kind, was held in the Seventy-first Regiment Armory, New York City, January 18 to February 12, 1911. More than 300 of the leading social workers, investigators, and persons interested in the well-being of children volunteered their time to make the exhibit a success. The cost of the affair amounted to $70,000. The chairman of the general committee was Mr. John Sherman Hoyt.

The department of schools was in charge of an expert committee, which had been preparing for the exhibit for a year or more.

The aim of the school exhibit was—

> to show the various aspects of the child's school life—not only the instruction and training he receives during the regular sessions of school, but also the educational influences which are brought to bear upon his life, directly and indirectly, through the instrumentality of the school, after school hours, in the evening, and during the long summer vacation.

The exhibit was explained by a force of more than 1,000 volunteer "explainers," serving in 2,400 shifts of four hours each, and covering each section of the exhibit every hour of the 24 days during which it was open.

There were 13 sections representing associations and clubs; churches, temples, and Sunday schools; health, homes, laws, and administration; libraries and museums; public and private philanthropy; streets, recreations, and amusements; schools; settlements; work and wages.

The New York City public-school system occupied the largest space in the section devoted to education. Two large screens at the entrance tabulated the decade of school growth from 1900 to 1910. Charts, photographs, and moving pictures were used to illustrate the school

curriculum. Music and physical and manual training were exemplified by classes, as were games, folk dances, the fire recess, etc.

The department of homes, which had a well-arranged display of model housefurnishing, clothing, food, etc., emphasized the fact that the next generation would be better prepared to cope with the domestic problems if all schools, elementary, especially, taught the proper division and control of family expenditures; and, as a part of the sewing course, presented a practical knowledge of materials and instructed each girl how to care for her own clothing in order to obtain the best service from it.

Among the measures advocated by the section on work and wages was the appointing of an officer by the board of education, who should have supervisory control of all minors engaged in street trades. The effect of home work in the tenements upon school attendance was emphasized. It was shown that many of the child workers of the tenements lose a third of school time and are often physically unfitted to study.

The need of more vocational schools was strongly urged.

The educational work of the 88 libraries and the 7 science and art museums was demonstrated by classes. A miniature children's library was exhibited, with all its features, such as story telling, circulation of books from the classroom libraries, as well as circulation from the children's rooms. The latter reached the total of 4,165,887 in 1909.

The first five days of the regular afternoon and evening conferences of the exposition were occupied with the subject of education. Supt. William H. Maxwell presided over the initial conference on the public school and the child.

At the opening conference District Supt. Edward W. Stitt advocated the wider use of the school plant. Special stress was laid upon this question in the exhibit.

CHILD-WELFARE EXHIBIT OF CHICAGO.

The remarkable success attending the Child-Welfare Exhibit of New York City induced the social workers and educators of Chicago to give a similar exhibition in the Coliseum of Chicago, May 11–25, 1911. The managers of the New York affair generously loaned their exhibit to Chicago without charge aside from the transportation expenses. But the people of Chicago did not rest content with a display of child welfare in New York City, but supplemented it with special features showing the life of the child in Chicago. Mrs. Cyrus Hall McCormick, jr., donated a large sum of money to finance the exposition. Experts in every line were secured. Mrs. Ella Flagg Young, superintendent of the Chicago public schools, was chairman of the committee on schools. The exhibition of graphic statistics

relating to child labor in Chicago attracted attention. On one wall were displayed a number of the certificates which are issued in Chicago to children over 14 years old. There were 2,918 of these issued in 1910 to child workers. "The age limit is too low," explained one of the placards. "Many of these children could barely read and write."

THE GATZERT FOUNDATION.

The University of Washington in March, 1911, received a donation of $30,000, the income from which is to be devoted to work for defective children. The money was given in memory of Bailey and Babette Gatzert, who were long residents of Seattle. Mr. Sigmund Schwabacher, of San Francisco, and the late Mr. Abraham Schwabacher, brothers of the late Mrs. Gatzert, contributed equally to the fund. The deed of gift provides that the income of the fund—

> shall be used to maintain a bureau of child-welfare—the work of said bureau to consist in the promotion in various ways of education for the better care and treatment of children suffering from defects, either physical or mental, especially such defective children as can in spite of their defects attend school of some sort and benefit by some form of school education and training.

PLAYGROUND ASSOCIATION OF AMERICA.

The fifth annual convention of the Playground Association of America was held at Washington, D. C., May 10–13, 1911. The report of the secretary indicated that playgrounds generally from one end of the country to the other had attracted more attention and received more financial support than during any previous year of the association's existence. Thirty-two cities now employing 643 workers are actively engaged in playground work. In the 12 months preceding the convention about $3,000,000 was spent in 184 cities for the improvement and establishment of playgrounds. Chicago and Cincinnati have each voted bond issues of a million dollars for recreation. Pittsburgh has voted $800,000 for the extension of its playground system and $200,000 for its maintenance.

By a unanimous vote of the convention the name of the Playground Association of America was changed to the Playground and Recreation Association of America. The reason given for this change of cognomen was that the association had outgrown "its former limited sphere of merely controlling playgrounds and now has halls of recreation for both children and grown-ups."

THE WILL OF MR. JOSEPH PULITZER.

Mr. Joseph Pulitzer, the proprietor of the New York World and the St. Louis Post-Dispatch, who died on October 29, 1911, made some notable gifts to education in his will, which was filed for probate on November 14, 1911. The most conspicuous features of the document

are the ratification of a gift of $1,000,000 to Columbia University for the founding of a school of journalism, and an additional sum of $1,000,000 for the school of journalism and for prizes which it is instructed to award. The second gift is to be paid to the university if within seven years of the testator's death the school shall, in the opinion of his executors, have been in successful operation for three years. In the meanwhile the income is to be paid to Barnard College, for scholarships. In the event that Columbia University fails to comply with the conditions, the bequest will go to Harvard University.

A bequest was also made to the trustees of Columbia University of $250,000 to establish a fund to be known as "The Pulitzer scholarship fund," the income therefrom to be distributed by the trustees—

among young men wholly or partly educated in the public schools of the city of New York, and who have passed their examinations in such schools with special credit, and who wish to receive a college education, but need pecuniary assistance for that purpose to give them means of support while fitting for and going through college.

Other bequests were made, among them being $500,000 to the Metropolitan Museum of Art and a like sum to the Philharmonic Society of New York City.

PHELPS-STOKES FUND.

The Phelps-Stokes Fund was incorporated on May 10, 1911, by the Legislature of New York. In addition to maintaining funds for erecting and improving tenement-house dwellings in the city of New York for the poor families of that metropolis, the corporation is further organized for the purpose of educating—

negroes, both in Africa and the United States, North American Indians, and needy and deserving white students, through industrial schools, the founding of scholarships, and the erection or endowment of school buildings or chapels. It shall be within the purpose of said corporation to use any means to such ends which shall from time to time seem expedient to its members or trustees, including research, publication, the establishment and maintenance of charitable or benevolent activities, agencies, and institutions, already established.

CARNEGIE CORPORATION OF NEW YORK.

On June 9, 1911, the Carnegie Corporation of New York was incorporated by the Legislature of the State of New York, for—

the purpose of receiving and maintaining a fund or funds and applying the income thereof to promote the advancement and diffusion of knowledge and understanding among the people of the United States, by aiding technical schools, institutions of higher learning, libraries, scientific research, hero funds, useful publications, and by such other agencies and means as shall from time to time be found appropriate therefor.

The incorporators were as follows: Messrs. Andrew Carnegie, Elihu Root, William N. Frew, Henry S. Pritchett, Robert S. Wood-

ward, Charles L. Taylor, James Bertram, and Robert A. Franks. The following officers were subsequently elected: Mr. Carnegie, president; Senator Root, vice president; Mr. Franks, treasurer; and Mr. Bertram, secretary.

The Carnegie Corporation has no connection with the previously organized bodies bearing the name of the ironmaster and philanthropist except so far as its trustees feel that the objects of the corporation will be promoted by aiding one or another of these institutions. The work of founding and aiding libraries, which has been carried on by Mr. Carnegie as an individual, will eventually be turned over to the corporation.

On November 10, 1911, Mr. Carnegie endowed the corporation with the sum of $25,000,000. This gift was in the form of 5 per cent first-mortgage bonds of the United States Steel Corporation, the bonds being given as at par. The income, of which the incorporators will have the disposal, is estimated at $1,250,000 a year.

STATE EDUCATION BUILDING, NEW YORK.

The Legislature of New York on June 2, 1911, passed an act authorizing the board of trustees of public buildings to contract for furniture, equipment, and decoration for the State education building for an amount not to exceed the aggregate sum of $75,000, in addition to the sum of $625,000 authorized by chapter 513 of the laws of 1910. On June 16, 1911, the sum of $250,000, in addition to the $500,000 authorized by chapter 13 of the laws of 1910, was appropriated for the construction and equipment of a power house, coal pockets, and conduits for furnishing heat, light, and power to the State capitol and education building at Albany. The legislature on July 29, 1911, passed an act authorizing the expenditure of $600,000 for continuing the construction of the State education building, also the sum of $200,000 for furniture, equipment, and decorating. On October 24, 1911, the sum of $200,000 was appropriated for furniture and office fixtures. It is expected that the edifice will be ready for occupancy in whole or in part some time during the year 1912.

STATE LIBRARY, NEW YORK.

An act providing for the reestablishment and enlargement of the State library was passed by the legislature on October 24, 1911. The sum of $1,250,000 was appropriated for this purpose, which includes the gathering of suitable books, pamphlets, manuscripts, and other materials for the reference, historical, education, law, medical, and technological libraries, and the sociological, genealogical, and other collections therefor.

THE WENTWORTH INSTITUTE.

The Wentworth Institute, of Boston, a new trade school established through the munificence of the late Arioch Wentworth, who left three and one-half millions of dollars for the purpose of industrial education, opened its doors to students on September 25, 1911. The buildings already erected include the foundry of the institute, main shop building, and a power house. Plans have been made for the expansion of the school in the future. For day students the fees are $6 per term and for evening students $6 per season of two terms, which sums do not pay even any considerable part of the expenses of instruction. The directors of the school considered that, if no fees at all were charged, some might apply who had little or no real interest in the work.

The courses of education that are to be offered are of two types: First, short practical courses, one year in length, for the young man who wishes to train himself to become a skilled workman of the highest grade. There will be six of these courses—three in manufacturing trades for machinists, patternmakers, and foundrymen, and three in the building trades for carpenters, plumbers, and electric wiremen. Second, two-year courses, intended for young men who have previously had a considerable amount of practical experience, but who are ambitious to become master mechanics, foremen, or superintendents. There will also be evening classes, in each one of the two shops and laboratories, for the benefit of students who are already employed during the day and can not afford the time to attend a day class.

SOCIAL ORGANIZATION OF THE UNIVERSITY HIGH SCHOOL.

By Franklin W. Johnson, *Principal.*

The University High School of the School of Education of the University of Chicago aims to cultivate the social nature of the pupils and has since its organization carried on a series of studies and experiments with the view of developing the principles and working out the means of social education through the medium of school life. The method of approach to the problem has been through the organization of the school life and by the incorporation of a new point of view into the old activities rather than by the introduction of new subjects into the curriculum. The general character of the experiments is indicated by the following accounts of the social activities, all of which are under the immediate supervision of the faculty committees.

Assembly.—The program of the weekly assembly is introduced by a brief service of song and responsive reading. The remainder of the hour is used in a manner to serve the interests of the school. Matters of immediate public concern are presented by pupils who have them in charge. In this way athletic games, debating contests, the student

publication, dramatics, etc., are discussed. School activities not so easily under observation of all are made the subject of special programs. The method of issuing the school daily, embodying a description of the whole process of bringing out a single issue is an instance of a program of this sort. Frequent musical programs are furnished by members of the faculty and pupils. Finally the discussion of vital topics by the officers of the school and occasional set lectures and addresses make up the varied program which has for its aim the development of public standards, and a public spirit which may at once express and stimulate the best in the life of the school.

Athletics.—The athletics of the school are under the direct charge of the department of physical education. The policy governing all interscholastic contests, the approval of schedules for each contest, the recommendation of rules of eligibility, and the decision as to eligibility of individual students are in the hands of the faculty committee on athletics and games. In general, it is the policy of the school to encourage all pupils to take a reasonable interest in athletics rather than to center attention on the production of a few successful teams. A suitable playground makes it possible to encourage interclass contests and games. All teams are given adequate instruction, interclass schedules are planned for all the school sports, and suitable recognition is given the winning class teams. Emblems for proficiency in athletics are publicly conferred once each quarter in the school assembly, with appropriate exercises designed to bring out the social and moral aspects of athletic life, and in particular to enphasize the fact that the individual has earned this recognition under strict rules guaranteeing the quality of his work.

Parties.—Every Friday during the autumn and winter at the close of the afternoon session an informal dance, open to all members of the school, is conducted under school supervision. These weekly parties have been given for seven years and have proved to be most helpful in the school life. Since all pupils of the school receive during the regular gymnastic classes the necessary instruction in dancing, they come to the parties able to participate on even terms. It is the custom for the boys and girls to come individually. No cards or programs are permitted. In form, the dance is a modified cotillion. Pupils must be prompt in coming and must remain throughout the hour. It has come to be the accepted rule of the afternoon that no pupil may refuse to dance with another. Public courtesy and school comradship characterizes these very simple but important social gatherings.

The Boys' Club.—The University High School Club, a social club for boys, occupies a two-story building on the school grounds. It is open to all boys and to the men of the faculty each school day from 12.30 to 6 p. m. on payment of a fee of $2 per semester. The officers

of the club are boys of the school who are under the supervision of a member of the faculty. The club provides opportunity for agreeable social intercourse among the boys for the entertainment of visiting athletic teams. Occasional social events take place in the clubhouse on Friday and Saturday evenings.

The Girls' Club.—The social and recreation rooms for the girls occupy several rooms in a school building. The girls of the school are organized into a society known as the Girl's Club, which has charge of these rooms. The object of the Girls' Club is to promote helpful good comradeship among the girls and to give them an opportunity to practice hospitality. In the housekeeping of the club, the girls are in close touch with the home economics department. The club was furnished by groups of girls working under the supervision of this department. Parents and teachers have cooperated to make the club a success, two members of the Parents' Association serving on the executive board and each committee having a faculty adviser. The very attractive clubrooms have proved a pleasant meeting place for the girls. They are open each school day from 12.30 to 4.30 p. m. There is no charge for membership. Each girl in the school is considered a member of the Girls' Club and is entitled to all its privileges.

Other clubs.—The Clay Club, open to boys and girls, holds weekly meetings with programs consisting of debating, declamation, extemporaneous speaking, music, and other social and literary features. The Engineering Club holds regular meetings throughout the year, at which reports are made and papers read, both by members of the club and by others. Frequent visits are made to the numerous manufacturing plants in the city. The Camera and Sketch Clubs interest many and make creditable exhibits of their work at the end of the year which attract the attention not only of members of the school but of many others. The Dramatic Club supplements regular work given to an elective class in connection with the English department. Perhaps the most creditable public performance connected with the social work of the school has been the annual dramatic entertainment which attracts a large and appreciative audience. Various musical clubs, both vocal and instrumental, meet regularly and furnish music for the school assemblies and for other public occasions. Modern language clubs make agreeable and profitable adjuncts to the classroom work in German and French.

Student publications.—There are three student publications. The University High School Daily is a four-page newspaper, which covers in a thorough manner the daily happenings of the school, and also serves as a bulletin for announcements to pupils and faculty. A separate group of editors has charge of each day's issue during the week, thus distributing the work so that it is not excessive. The Midway is a monthly devoted to literary work. The stories, poems,

and other material used are selected from the regular theme work of the English classes. The Correlator is an annual containing 250 pages of high literary and artistic merit.

The Students' Council.—The Students' Council is a representative body, consisting of the presidents and members elected by each class. Regular meetings are held at which matters of general interest to the school are discussed. Recommendations from the students to the faculty are made through the medium of the council. Measures under consideration by the faculty are sometimes referred to the council, and their opinion is sought.

Honor societies.—A group of honor societies presents a unique feature of the school. One of these, the Senior Honor Society, is based on scholarship, and is open to boys and girls of the senior class who have been members of the school at least two years and have attained a certain high record of scholarship. Two other societies, one for the boys and the other for the girls, are composed of seniors who have performed distinguished service in promoting the social, as contrasted with the scholastic, life of the school. Membership in these honor societies is not secured until the election is approved by the faculty.

Fraternities.—It is felt that such a varied and complete social life as the school provides for its members should remove all desire for the organization of secret societies among the pupils. However, considering the fraternity situation in this and other communities, it is regarded necessary to make a formal prohibition of such organizations and to require of all applicants for admission to the school a statement, signed by the applicant and also by a parent or guardian, that the pupil is not and will not become a member of any secret organization whatever. The responsibility for the keeping of this pledge rests upon the pupil and his parents or guardian. The school takes every possible step to remove opportunity or temptation to violate the pledge, and promptly removes anyone who is known to have violated it.

The Parents' Association.—The intelligent and substantial cooperation of the Parents' Association makes possible the extensive social organization of the school. The association has taken up for its consideration many of the features of the social organization described, and each year furnishes the money necessary to maintain these activities. Through committees and individuals they come into very close contact with the social life of the school. Meetings of the association are held twice each month during the school year.

The university settlement.—The social life of the school finds expression on the altruistic side in various activities connected with the university settlement. An effort is made to have these activities grow naturally from the normal social life of the school. During the

last two years, the classes in dramatic art have given two plays on the settlement stage which they had already given at the school; the girls' gymnastic teams have given a series of drills and games in the settlement gymnasium; at Christmas, the students have provided useful gifts for the old people of the settlement; the school has also provided for summer outings for boys and girls of the settlement by money raised from musical and other entertainments.

NATIONAL MUNICIPAL LEAGUE.

The sixteenth annual meeting of the National Municipal League was held in Buffalo, N. Y., November 14–17, 1910. The committee on school extension, of which Prof. Edward J. Ward is chairman, made a report in which the term "social center" was defined as—

> the public building or group of buildings and grounds which form the capital of the neighborhood, the focal point of its common educational, recreational, political, and social life, the institution which is to the neighborhood, or smaller division of a city, as the civic center is to the city as a whole.

Prof. Charles Zueblin and Dr. Samuel Crothers read papers on "The historic antecedents of the social center." The use of the school buildings for nonpartisan gatherings of citizens for public discussion was strongly emphasized in the report of the committee. Mr. Henry C. Campbell, president of the Milwaukee Federation of Civic Societies, remarked:

> It is no exaggeration to say that in making the schoolhouse the forum of the people lies the chief hope of perpetuating the Republic and of perfecting its institutions.

Mr. L. S. Richards read a paper on "The public-school building as nonpartisan political headquarters." He compared the benefits flowing from this use of the public-school buildings with the present results of the use of saloons for this purpose. The advantages to be gained from the permanent installation of voting machines in public-school edifices were emphasized. The use of these buildings as polling places would serve, it was claimed, as an object lesson in civics to the children, also to the foreigners in the evening schools.

The use of schoolhouses for library purposes, free lecture and recreation centers, art galleries, etc., was urged. Mr. Clarence A. Perry, of the bureau of school plant utilization inquiry of the Sage Foundation, presented a survey of the present status of school, extension work in the United States. He reported that over 100 cities are engaged in the movement, in 18 of which there is extensive development.

The officers of the league for 1910–11 are as follows: President, Hon. William D. Foulke, Richmond, Ind.; secretary, Mr. Clinton R. Woodruff, 703 North American, Philadelphia, Pa.

FARMERS' INSTITUTE WORKERS.

The fifteenth annual meeting of the American Association of Farmers' Institute Workers was held at Washington, D. C., November 14–15, 1910. Many reports from committees were read. The importance of movable schools of agriculture as adjuncts to farmers' institutes received much attention. An interesting paper was read by Mr. P. C. Parks, of Atlanta, Ga., on the "Conditions among negro farmers in the South." He said:

> We are up against the fact that in spite of all we say to the contrary, agricultural production must turn in the last analysis upon the negro farm hand, and if the farming efficiency of these farm workers can be gradually raised, we will be working at the root of the gravest problem now facing the South, and I may say the whole country.

Mr. Parks emphasized the importance of farming education among the masses of negroes in the rural districts, stating that to be effective—

> any organized effort to reach and help the negro farmers must be wisely planned and judiciously conducted to suit the needs of both the negroes and white farmers in the rural districts. This means State control and a special department of farmers' institutes for negro farmers.

The officers of the association for 1911 are as follows: President, A. M. Soule, Athens, Ga.; secretary-treasurer, Mr. John Hamilton, Department of Agriculture, Washington, D. C.

RURAL LIFE CONFERENCE.

The fourth Rural Life Conference was held in connection with the summer school of the University of Virginia, July 17–21, 1911. The conference confined itself mainly to the discussion of cooperation, woman's work, and the church in rural neighborhoods. Mr. B. H. Crocheron, principal of the Agricultural High School, Sparks, Baltimore County, Md., delivered an address on "Six means for improvement of rural schools." He said:

> Industrial teaching is the most obvious phase of rural school improvement. If the business of our farm people is agriculture, it would seem but reasonable that the schools should teach that which will help them most in making a living. The old discussion of the value of "book learning" on farms has long ago disappeared before the blast of the accumulated knowledge built up in the last 50 years. The typical farmer no longer doubts the efficiency of agricultural teaching, but rather strives to gain for his children the knowledge which could not be his. The average rural teacher can, after some preparation in the elements of agriculture, give instruction that will help immensely the experiment stations and colleges in their teaching of the more advanced problems. Domestic science for girls is the companion of the agricultural course for boys. With a one-burner alcohol stove the rural teacher can demonstrate good cookery on a pedagogical basis which the child's mother must have lacked. Manual training and simple carpentry, for boys is both popular and practical, for the handy boy is very useful on the farm.

Addresses were made by Dr. John L. Coulter, of the United States Department of Commerce and Labor; Hon. O. B. Martin, United States Department of Agriculture; Rev. Henry F. Cope, and others.

VII. HEALTH AND HYGIENE.

AMERICAN SCHOOL HYGIENE ASSOCIATION.

The fifth annual congress of the American School Hygiene Association was held in New York City, February 2–4, 1911. Mr. Frank Irving Cooper delivered an address on "Schoolhouses and the laws," illustrated by a chart showing the status of compulsory regulation of schoolhouse construction in the United States in 1910. He said:

So far as can be ascertained only eight States have passed laws worthy of the name bearing on schoolhouse construction. Of this number only two States have regulations on fireproof construction, and of this number only one State, Massachusetts, has passed regulations on fire-retarding construction. Sixteen States have passed regulations controlling the plan, but of 48 States of our country 22 States have no laws or regulations whatever to prevent school buildings being built as crematories. In a majority of cases the laws as they have been passed state that plans for school buildings must be submitted to a superintendent or other authority for approval. This means a control by men and not by law. Regulations for the construction of school buildings should be specific and should be the law of the land.

Dr. Luther H. Gulick made an address on "What our city schools are doing for the health of our children."

AMERICAN ASSOCIATION FOR CONSERVATION OF VISION.

This association was organized March 25, 1911, in New York City. The objects of the association as set forth in the constitution are as follows:

To study and investigate all conditions and causes which result in blindness or impaired vision.

To determine so far as possible the relation of eye strain to physical and mental health and to human efficiency.

To devise and provide ways and means for the prevention of blindness and the conservation of vision.

To disseminate knowledge concerning all matters pertaining to the care and use of the eyes.

The business affairs of the association will be controlled by an executive board of nine managers. Six separate departments will investigate eye diseases, industrial environments affecting good vision, care of the eyes of school children, legislation, statistics, etc. Each department will have a director, who will be appointed by the president and approved by the board.

The following officers were elected: President, Dr. F. Park Lewis, Buffalo, N. Y.; secretary, Miss Ida B. Hiltz, New York City.

PUBLIC HEALTH EDUCATION COMMITTEE OF THE AMERICAN MEDICAL ASSOCIATION.

In accordance with a resolution passed by the house of delegates of the American Medical Association for the year 1909–10 a committee on public-health education was formed for the purpose of dissemi-

nating "accurate information concerning the nature and prevention of disease and the general hygienic welfare of the people." The committee reports having given 1,930 lectures, free from technicalities and filled with sound teaching regarding public health. Says the report:

The direct administration of the work has been subdivided and carried on by State secretaries and county chairmen. The State secretaries and county chairmen have gotten in touch with women's clubs, Y. M. C. A's, mothers' and teachers' clubs, social settlement clubs, etc., and have made up lists of those doctors who would cooperate with us by giving lectures on health topics.

The chairman of the central committee is Dr. Rosalie S. Morton, 6 East Fifty-eighth Street, New York City, and the secretary, Dr. Evelyn Garrigue, 616 Madison Avenue, New York City.

VIII. EDUCATION OF THE COLORED RACE.

TUSKEGEE NEGRO CONFERENCE.

The twentieth annual Tuskegee Negro Conference, under the auspices of the Tuskegee Normal and Industrial Institute, was held at Tuskegee, Ala., January 18–19, 1911. Over 2,000 visitors attended the exercises. Not only were farmers present in large numbers, representing all the Southern States, but also many prominent educators of the South. The chief address was made by Dr. Booker T. Washington, principal of the Tuskegee Institute. His remarks on the mortgage and lien system aroused interest. Among other things he said:

The time has now come when the negro farmer should be so thrifty, so industrious, so full handed that he can live for a year or longer without having to go to somebody to supply him with food, clothing, animals, and implements to be used while he is making his year's crop.

Colored farmers throughout the Southern States might as well understand that the old methods are passing away and new ones are to take their places. I refer especially to that old habit of mortgaging the crop, animals, etc., for the money on which to live while the crop is being raised. The negro in the South has been free for more than 45 years, and it ought not to be necessary much longer for any proportion of them to be treated as though they were children instead of men.

He dwelt on the importance of giving negro farmers better educational advantages to the end that the whole South might profit thereby. He remarked:

The old crop lien or mortgage system has proven disastrous and costly both to the white man and to the black man, and the only way to get rid of this system is for every colored farmer to be so industrious, so thrifty and saving that he will save enough out of this year's crop to live on during the next year without going into debt.

To speak roughly, one-fifth of the farming land in the Southern States is occupied or controlled by colored people. This means that, unless the negro farmer gets as much

out of this land as any other class of farmers can get out of their land, that in the same degree that they fail to do this the South as a whole will be the poorer.

The time has come when, in my opinion, the white citizens of the South should realize that a very liberal policy should be pursued in connection with the education of the negro as a farmer. It is too much to expect that the negro farmer will get the best results and succeed without having any money spent on him to make him a more successful farmer while thousands of dollars are being spent every year throughout the South in the education of the white farmers.

At the termination of the conference a declaration to the public was adopted which summed up many of the results of the 20 annual conferences that have been held under the auspices of the Tuskegee Institute. The negroes were admonished to continue to build schoolhouses and lengthen the school terms; to see that better teachers and ministers are secured; to continue to purchase land and improve the homes.

HAMPTON INSTITUTE.

The forty-third anniversary of Hampton Normal and Agricultural Institute, Hampton, Va., was celebrated on April 26–27, 1911. The trade-class program was particularly interesting. The class-president address was delivered by Madikane Q. Cele, a Zulu prince from Natal, South Africa, who worked his way through the institute and acquired the trade of a wheelwright. Addresses were made by a number of eminent visitors, among them being Dr. William J. Schieffelin, Mr. Robert C. Ogden, Rev. Charles E. Parks, and Lord Eustace Percy, of the British Embassy, Washington, D. C.

On a large wooden revolving platform, divided into 6 sections, 11 sets of Hampton tradesmen carried on their customary work in full view of an audience of over 1,500. Some 30 out of 53 boys of the senior trade class were actively employed in groups in shingling a roof, nailing on weatherboards, house painting, fitting a coat, using a sewing machine, mending shoes, erecting a brick arch, applying white plastering, operating a printing press and a turning lathe, constructing a railroad hand truck, tiring a wheel, installing a bathtub, wiping lead joints, and making a picture frame.

HAMPTON NEGRO CONFERENCE.

The fifteenth annual meeting of the Hampton Negro Conference was held at Hampton Institute, July 19–20, 1911, under the direction of Dr. Thomas Jesse Jones, of Hampton Institute and the United States Bureau of the Census, Washington, D. C. The aim of the conference was "to suggest practical ideas and methods for improving race conditions." The following topics were discussed: "Women's work for community betterment"; "Place of the church in rural life"; "Improvement of rural life"; "Negro organization society of Virginia"; and "Cooperation in Virginia."

Mrs. Harris Barrett, of Hampton, Va., a graduate of the institute, and president of the Virginia federation of colored women, outlined the story of the growth of the federation, which was organized in 1907 at the Hampton Negro Conference. Mrs. Barrett's report demonstrated clearly that the negroes of Virginia have been learning to work together to uplift community life. The negro women's clubs which had pledged $10 each for an industrial school for wayward girls redeemed their pledges. Mrs. I. C. Norcum, of Portsmouth, Va., who is chairman of the ways and means committee of the federation, read a paper on "Women's community clubs," which showed the relation of the work of colored women's clubs to improvement of the welfare and appointment of the home, including well-cooked meals, school-improvement societies, sanitary reforms in rural life, care of children, and the antituberculosis movement.

Dr. S. G. Atkins, secretary of education for the African Methodist Episcopal Zion Church, urged that one must investigate the conditions of the colored people in rural communities to understand why so many have drifted into the cities. He contended "that what was mere waywardness in the country youth became crime and dissipation when they reached the towns and cities." He then cited six reasons for the movement of negroes to the cities, as follows:

Decline of parental authority, lack of entertainment in country districts, want of good school facilities, so-called "poor wages," and ignorance of what to do with the land.

Dr. Atkins declared that Hampton Institute should establish a form of religious demonstration work to help the negro ministers check the movement toward the cities.

Dr. James H. Dillard, of New Orleans, La., president of the Rural School Fund Board, said that the country minister must cease ignoring problems of better health, better homes, better schools, and better churches.

Rev. C. L. Bonner, of Toccoa, Ga., spoke of the needs of the negro along the ordinary lines of farm life. He reported the introduction of farm demonstration work by preacher-demonstrators in his own community.

Prof. W. T. B. Williams, field agent of Hampton Institute, described the means employed for getting negro organizations to cooperate with the Negro Organization Society, which seeks to improve education and health conditions among the colored people of Virginia.

Resolutions dealing with the following topics were unanimously adopted: Influence of the negro church upon moral, educational, and material welfare of rural communities; betterment of school grounds and buildings; ministers' institutes; cooperation of all organizations

for race advancement; crusade against consumption; better preparation of negro school teachers; and the need of stimulating public interest in colored schools.

NEGRO RURAL SCHOOL FUND—ANNA T. JEANES FOUNDATION.

The board of trustees of the Negro Rural School Fund met at the White House in Washington, December 12, 1910. The President of the United States presided at the meeting. Dr. James H. Dillard, president of the board, spoke of the effective work accomplished during the year toward the direct improvement of the country schools. When the fund was established, the question arose, "How best to spend, how to make count for most, the resources at the command of the board." Dr. Dillard said:

> The simple suggestion of Mr. Jackson Davis, the superintendent of a county in Virginia, pointed the way of putting into effect certain ideas which seemed vital to the purpose of the fund. * * * The suggestion of Mr. Davis was that we should assist him in injecting the influence of a supervising industrial teacher into the work of the country schools in his county. The proposition was promptly accepted, and the plan thus inaugurated has been welcomed and approved by many other superintendents throughout the South.

Prof. B. C. Caldwell, field agent of the board, reported the expenditure of $2,500 of the income of the fund—

> in helping country schools to build and equip houses, mostly industrial rooms, kitchens, and shops, and $750 in helping to extend the school term. The rest of the money was spent for teachers' salaries. The calls for Jeanes teachers have been so many and so urgent this year that practically the whole available income for the year has been appropriated for salaries of teachers.

The Jeanes teachers are reaching about two thousand rural school teachers and about a hundred thousand country children. While these instructors are paid by the Jeanes foundation, they are chosen and appointed by the county superintendents, and do their work under the direction of the county school officers.

The total number of teachers, supervisors, and organizers for the year 1910–11 was 103, distributed as follows:

Alabama	15	Mississippi	15
Arkansas	6	North Carolina	12
Florida	3	South Carolina	7
Georgia	11	Tennessee	4
Louisiana	14	Texas	7
Maryland	1	Virginia	8

The salaries amounted to $33,987.50; counties visited, 101. The average salary of the 32 men employed was $358.67; of the 71 women, $317.04.

The officers of the board are: President, Dr. James H. Dillard, 571 Audubon Street, New Orleans, La.; vice president, Mr. Walter H.

Page, editor World's Work, New York City; treasurer, Mr. George Foster Peabody, 2 Rector Street, New York City; secretary, Mr. Robert R. Moton, Hampton, Va.

NATIONAL ASSOCIATION OF TEACHERS IN COLORED SCHOOLS.

The eighth annual session of the association was held at St. Louis, Mo., July 26–30, 1911. The meeting emphasized the importance of constructive work on the part of the colored people and the whites who are interested in their progress. Conditions were set forth regarding the short school terms so prevalent in colored schools, the inadequate salaries of teachers, the lack of supervision, the widespread neglect of proper equipment for schools, and the almost complete absence of public high schools and real normal schools to prepare teachers for the elementary schools.

The president of the association is Mr. W. T. B. Williams, a field agent of Hampton Institute and of the Slater and Jeanes funds. Dr. Booker T. Washington delivered the closing address to an audience of 9,000 people.

NATIONAL NEGRO BUSINESS LEAGUE.

The meetings of the National Negro Business League, held at Little Rock, Ark., were largely attended. Dr. Booker T. Washington, president of the league, delivered an address, on August 17, 1911, before an audience of 2,000 people, 700 of them white. He estimated the value of all products of negro farmers in the South during the year 1910 to have been $500,000,000, and the total earnings of negroes in other callings at $200,000,000. "How many of these millions of dollars to-day," he asked, "remain in our hands?" He declared it the paramount duty of the negro minister, the negro teacher, the negro business man, of the leaders of the Negro race everywhere, to see to it that a larger proportion of the tremendous amount earned by the race is invested in lands, houses, banks, schools, industrial institutions, colleges, churches, "so invested that it will remain for all time in the possession of this generation and succeeding generations."

> If 10 per cent only of our annual earnings were set aside for such investment as I have suggested, the race would have every year $70,000,000 which would go into its permanent enrichment and enlightenment. There is another feature of race development to which I can not fail to call your attention at this time. This refers to the matter of seeing to it that the youths of the race in a larger measure prepare themselves for service in the fundamental skilled trades. Too large a proportion of youths are content with little odd jobs, or hand-to-mouth callings.

Dr. Joseph A. Booker, president of the Arkansas Baptist College, Little Rock, Ark., spoke on "Negro school building by negroes." For 25 years Dr. Booker has presided over the destinies of a distinctly negro school. He asserted that the Arkansas Baptist College was for the most part erected by the pennies and nickels and dimes of washer-

women and laboring men, and was an object lesson of self help among the negroes of the South. Twenty-five years ago the college possessed nought save the name; it now owns property in Little Rock valued at between $60,000 and $70,000 and a $10,000 farm north of the city.

IX. INTERNATIONAL RELATIONS.

EXCHANGE PROFESSORS.

An exchange of professors was established in 1904 between Harvard University and the University of Berlin, and was extended by the action of the Prussian minister of public instruction to other universities of the Kingdom.

The exchange between Columbia University and the University of Berlin was instituted in 1906 by the endowment at the latter of the Theodore Roosevelt professorship of American history and institutions. This was followed by the establishment of the Kaiser Wilhelm professorship of German history and institutions, to be filled each year by the trustees of Columbia University upon the nomination of the Prussian ministry of education. Similar arrangements have been perfected between the two American universities named and the University of Paris. The system of exchanges is extending to other universities. It may be noted, also, that several universities of this country have lectureships which are either filled occasionally by foreign scientific men and scholars, or which are annually filled by foreign appointments. The following exchanges have been announced for 1911–12:

Theobold Smith, Ph. B., M. D., A. M., LL. D., professor of comparative pathology, will represent Harvard University at the University of Breslau.

Prof. Dr. Willy Kukenthal, director of the zoological institute and museum, University of Breslau, in exchange will lecture at Harvard.

The lectureship established by Mr. James H. Hyde, of New York City, at the Sorbonne, Paris, will be filled by W. M. Davis, M. E., S. D., Ph. D., Sturgis-Hooper professor of geology at Harvard University. In exchange Prof. Charles Diehl will represent the University of Paris at Harvard. The subject of his lectures will be Byzantine history.

The trustees of Columbia University have nominated as the Theodore Roosevelt professor at the University of Berlin Paul S. Reinsch, Ph. D., professor of political science at the University of Wisconsin.

The Kaiser Wilhelm professor is Josef Schick, Ph. D., professor of English philology in the University of Munich.

The University of Paris will be represented at Columbia University by Prof. Gustave Lanson, Litt. D., associate dean of the faculty of letters of the University of Paris, member of the Conseil Supérieure de L'Instruction Publique.

Members of the Germanistic Society of Chicago have for several years past provided funds which have enabled the University of Chicago to carry on an exchange with German institutions.

In accordance with that plan, Prof. Hermann Oncken, of the University of Giessen, now of the University of Berlin, lectured in the department of history of the University of Chicago for six months, during the autumn quarter of 1905 and the winter quarter of 1906.

Prof. J. Laurence Laughlin, head of the department of political economy, gave lectures in Berlin during the spring semester of 1906, one before the University of Berlin and seven before "Die Vereinigung für Staatswissenschaftliche Fortbildung," and three lectures also before a similar organization in Cologne.

Dr. Heinrich August Alexander Kraeger, professor of the history of literature and art at the Royal Academy of Art in Dusseldorf, lectured in the University of Chicago throughout the autumn quarter of 1906 and the winter quarter of 1907.

Prof. Ernst Daenell, Ph. D., professor extraordinarius in the department of modern history of the University of Kiel, lectured in the University of Chicago throughout the autumn quarter of 1908.

Prof. John Matthews Manly, head of the department of English, University of Chicago, conducted courses in the history of the drama during the spring semester of 1909 in the University of Göttingen.

Prof. Dr. Lorenz Morsbach, professor of English philology in the University of Göttingen, lectured in the University of Chicago during the autumn quarter of 1910.

Prof. A. A. Michelson, head of the department of physics (Chicago), lectured before the University of Göttingen during the spring semester of 1911.

The matter is arranged between the University of Chicago and the Germanistic Society of Chicago on the one hand and the Department of Education of Berlin on the other.

The University of La Plata and the University of Michigan have arranged for cooperation in the work of the astronomical observatories. Prof. W. J. Hussey has been appointed director of La Plata Observatory, but is still to remain director of the observatory of the University of Michigan. He will divide his time equally between the two institutions, spending the second semester of each year at Ann Arbor.

RELATIONS BETWEEN AMERICAN AND SCANDINAVIAN UNIVERSITIES.

Through the influence of the American-Scandinavian Society, the movement for the exchange of professors and students with Scandinavian countries is extending. This work will be fostered by the increased resources of the society through a recent bequest made in the will of its late president, Mr. Niels Poulson, president of the Hecla Iron Works, Brooklyn, N. Y. During his life Mr. Poulson donated $100,000 for the purposes of the society, and by his will left it the residue of his estate. Shortly before his death, which occurred May 3 of the current year, the American-Scandinavian Foundation was incorporated by a special act at Albany, N. Y., to handle the funds which he had donated. It is understood that the income of the foundation will be largely used for student exchange between the Scandinavian countries and the United States, and in other ways to promote closer relations between those nations. It is not probable that the professor exchange will be continued by the organization, as that movement seems now to have been taken up by the universities themselves.

PERSIAN-AMERICAN EDUCATIONAL SOCIETY.

The Persian-American Educational Society, an organization which seeks to establish closer relations between Persia and America, met in Washington, D. C., June 16–17, 1911. The annual report of the society was submitted by Joseph H. Hannen, showing the progress that had been made in extending knowledge of Persian art and industry in the United States. Addresses were made by Mirza Ali Kuli Khan, chargé d'affaires of the Persian Legation in Washington; and Dr. Elmer E. Brown, United States Commissioner of Education, and others. A resolution was adopted recommending the appointment by the Persian Parliament of an educational commission to visit the United States to study its public-school system. The following officers were elected: William H. Hoar, president, Fanwood, N. J.; Joseph H. Hannen, secretary, Washington, D. C.

EXCHANGE BETWEEN THE UNITED STATES AND JAPAN.

An exchange of professors between the United States and Japan has been arranged on the following basis: Seven American universities—Yale, Columbia, Johns Hopkins, Virginia, Illinois, Brown, and Minnesota—are to contribute $500 each in order to send an American representative to the University of Japan every other year. In exchange Japan will send, biennially, a representative to the United States to spend four weeks in each of the participating universities. The American representative is to be selected by the presidents of these institutions, but he may or may not be connected with any one of them.

The Japanese representative for 1911–12 is Dr. Ignazo Nitobe, professor of colonial politics in the University of Tokyo, and formerly a student at Johns Hopkins University, the University of Bonn, and the University of Brussels.

FOREIGN PROFESSORS AT THE LOWELL INSTITUTE.

It is of interest to note in this connection that Dr. Franz Cumont, president of the Archæological Society of Brussels, has delivered a series of lectures before the Lowell Institute on the archæological explorations in the Tigris-Euphrates Valley, and before the same institution Dr. George A. Reisner, of Cambridge University, England, has delivered a course of lectures on Egyptian archæology.

THE KAHN FOUNDATION.

The Kahn Foundation was established several years ago by M. Albert Kahn, a prominent banker of Paris, for the purpose of sending a few representative teachers into foreign lands for travel, in order to increase their knowledge of languages and broaden the scope of their acquaintance and sympathies. Funds for this purpose were established in France, Germany, Japan, and England. During the past year the United States was included among the beneficiaries of the foundation. The American trustees are as follows: Mr. Edward D. Adams, Dr. Nicholas Murray Butler, and Dr. Henry F. Osborn, of New York City; Dr. Charles W. Eliot, of Cambridge, Mass.; and Dr. Charles D. Walcott, of Washington, D. C. On July 1, 1911, the first Bourses de Voyage became available for American teachers, and the first two boursiers, or fellows, selected were Dr. John H. T. McPherson, professor of history and political science at the University of Georgia, Athens, Ga., and Dr. Francis Daniels, professor of Romance languages at Wabash College, Crawfordsville, Ind. An absence from home of at least one year, including in the itinerary not only Europe but Egypt, India, Japan, and other countries of the Orient, is the suggestion of the founder of the trust. Each boursier is expected to submit a written report to the trustees, giving his impressions of the places visited.

ASSOCIATION OF COSMOPOLITAN CLUBS.

The international or cosmopolitan club movement in many of the colleges and universities of the United States is one of world-wide significance. The membership is composed chiefly of the foreign-born students at our institutions of higher education—students coming from neighboring American States, from Europe, Asia, Africa, and Australasia. The history of the movement is an interesting one. The first club of this kind was formed at the University of Wisconsin. Mr. Louis P. Lochner, general secretary of the Association of Cosmo-

politan Clubs, in an article contributed to the Review of Reviews, March, 1908, writes as follows:

On the evening of March 12, 1903, 16 foreign students of the University of Wisconsin, representing 11 different nationalities, gathered in the modest little apartments of Karl Kawakami, a Japanese student. An international club was to be organized in which all foreigners of the university, rich and poor, were to meet on an equal basis of mutual friendship and brotherhood. No similar organization at any other university furnished them a precedent. The action of these 16 men was original, unsolicited, and unprecedented. H. Hagopian, an Armenian, headed the organization; a Norwegian was its first vice president; a Japanese, a South American, and a German, respectively, filled the offices of secretary, treasurer, and censor.

From a nucleus of 16 students in 1903, the cosmopolitan club movement has developed to a powerful body of over 2,000 young men, representing almost 60 different countries in 1910.

A writer in the Cosmopolitan Annual, 1908, says:

In every case the purpose of these international clubs has been to bring closer together men from different countries, to learn the customs, viewpoints, and characteristics of other nationalities, to remove national prejudices, and to establish international friendship.

Cornell University, on November 30, 1904, formed a cosmopolitan club. The University of Michigan followed in January, 1906; the University of Illinois in October, 1906; Purdue in September, 1907; Louisiana in October, 1907; Ohio State in October, 1907; and Chicago in November, 1907. Since the year 1907 students of many other institutions have organized cosmopolitan clubs. The Harvard Cosmopolitan Club, which was founded February 12, 1908, has over 200 members. The club at Cornell has erected a building which cost $50,000. Twenty-six clubs are now affiliated with the national organization, one of them a Canadian chapter, and nine are about to apply for membership.

On December 28–30, 1907, delegates from all existing clubs met at the University of Wisconsin to organize an association of cosmopolitan clubs. A permanent union was effected, and a constitution and by-laws were adopted. The University of Wisconsin International Club was made the executive chapter, and the Cornell Club the recording chapter.

Article II of the constitution declared:

The object of the association shall be to unite and strengthen the existing chapters, to promote the organization of chapters in other colleges and universities, to cultivate the arts of peace, to establish strong international friendships, and to carry out the motto of the association, "Above all Nations is Humanity."

This association shall be nonpartisan and nonsectarian.

At the third annual convention of the association, held at Cornell University, Ithaca, N. Y., December, 1909, an important step was advocated. It was tentatively proposed that an affiliation be formed with Corda Fratres, an organization with similar aims to those of the American society, and whose membership includes 60,000 students

in the universities of Europe. At the fourth annual convention, held at the University of Illinois, Urbana, Ill., December 28–31, 1910, the pros and cons of a world federation under the Corda Fratres banner were debated. The final decision was postponed until the fifth annual convention in 1911. There is a strong possibility that such an amalgamation will be effected. It was decided to send four delegates of the association to the meeting of the Corda Fratres to take place at Rome in 1911, "for the purpose on the one hand of more fully acquainting our European brothers with our aims and purposes, and on the other hand of becoming more fully informed with reference to Corda Fratres."

The cosmopolitan club leaders have already rendered signal service to the Corda Fratres. Mrs. Lucia Ames Mead, in a pamphlet published by the International School of Peace, Boston, Mass., entitled "Educational organization promoting international friendship," writes as follows concerning the affair:

At the last biennial meeting of the Corda Fratres, held at The Hague in August, 1909, representatives of our cosmopolitan clubs, at a critical period in the history of Corda Fratres, when two elements were discordant, were asked to act as umpires, and succeeded so admirably that the society took a new lease of life. Its central bureau is to remain no longer in the hands of one nationality, but must be moved about. In 1911 the bureau will come to America. This international federation of students, whose motto, "Corda Fratres," gives it its title, was founded at Turin in 1898, but not very successfully organized until September, 1905, at Liege, Belgium. At first the federation had been divided into national sections, but last year it was reorganized, so as to discard national lines and to form self-governing local associations as the units of the federation. This has 63 local chapters, with 15,000 members of various European universities, though few, if any, in Germany and England. With the accession of 40,000 French students and our cosmopolitan clubs, their numbers nearly tripled in 1909. The principal object of the international federation of students is "to protect and promote the idea of solidarity and fraternity among students." Any student, regardless of his political or religious ideas, has a right to become a member if he is registered in an institution of higher learning. Each member pledges himself to promote the spirit of international union among the youth and to try to "dissipate the prejudices and hatred which render states reciprocally hostile and always on a war footing," and to promote the work of peace and arbitration between nations. It is also the object of the federation "to put in correspondence the students themselves" and to "insure reciprocally hosts and friends in the large cities upon the occasion of travel." The official language of the federation is French, together with the language of the country where the congress is held. International congresses are held once in two years. Austrians, Italians, and French have hitherto been most in evidence in the work of the federation. No practical results have as yet been achieved which equal those of the American cosmopolitan clubs. With the cooperation of this able body on this side of the Atlantic and with the eloquent Mr. Pierre Julian as president, it gives promise of great usefulness. Its executive committee has representatives from France, Italy, Hungary, Holland, Sweden, United States, and South America. Every second term an American will be awarded the international presidency.

The fifth convention of the association will be held at Purdue University, La Fayette, Ind., in December, 1911.

The official organ of the Association of Cosmopolitan Clubs is the Cosmopolitan Student, published monthly at Madison, Wis. Mr. Louis P. Lochner is the editor. The activities of the cosmopolitan movement throughout the world are recorded in this journal.

TURKISH STUDENTS IN THE UNITED STATES.

Through the agency of the American ambassador at Constantinople, acting in accordance with advices from the State Department, the attention of the Turkish Government has been directed to facilities offered by American universities for the education of students whom the Turkish Government has arranged to place in foreign universities. Several of the leading universities of this country have agreed to give free tuition to a certain number of students from Turkey designated by their Government, and in accordance with these arrangements three students selected by examinations held at Constantinople and two others have already been sent, at the expense of the Ottoman Government, to Columbia University, New York City. It is understood that four of the number are Moslems and one a Greek, but the aim of all is to prepare themselves for usefulness in their native country.

CHINESE STUDENTS IN THE UNITED STATES.

As a result of agreements between this Government and the Government of China, growing out of the action of Congress providing for the remission of a portion of the Chinese indemnity for losses and expenses incurred in the Boxer disturbances of 1900, the policy was adopted by the Chinese Government of sending students to the United States. This action on the part of the Government was supplemented by provincial authorities in China, and as a consequence the number of Chinese students coming to the United States for education has reached important proportions. Experience showed the necessity of insuring that the students selected should be fully able to profit by the opportunity thus afforded, and consequently special examinations were ordered by the Chinese Government as the basis of selection. Recently an institution (the Tsing Hwa-yuan Academy) has been established at Pekin, in which the Government has instituted a special course of study for students to be sent abroad, and after the present year the students sent to the United States will be selected from those who have pursued the special course in this academy. There are at present between eight and nine hundred Chinese students in the higher institutions of the United States, of whom about one-half are Government students supported by the different Provinces and by the remitted part of the Boxer indemnity fund. It is an interesting fact that among the teachers chosen by the Chinese Government for the instruction of students in the Pekin Academy 10 of the men and 8 of the women are Americans.

CHAPTER VII.

PROGRESS IN INDUSTRIAL EDUCATION DURING THE YEAR 1910–11.

By Charles R. Richards,
Director of Cooper Union for the Advancement of Science and Art, New York City.

IMPORTANT EVENTS OF THE YEAR.

Perhaps the most significant and fruitful happening in the field of industrial education during the year 1910–11 was the visit to this country under the auspices of the National Society for the Promotion of Industrial Education of Dr. Georg Kerschensteiner, superintendent of schools, Munich, Bavaria. Dr. Kerschensteiner's work in developing the remarkable system of industrial continuation schools in Munich has received much attention for several years from American educators, and his presentation of the history, administration, and economic results of these schools before audiences composed of manufacturers, business men, and teachers in six of the largest cities of the country, aroused a high degree of interest. The point that undoubtedly made the deepest impression upon his audiences is the fact that the central principle of the Munich organization is a working cooperation between employers and the public-school system, a cooperation that not only makes toward the solution of the economic problems involved, but one which leads to the highest efficiency in the instruction. Dr. Kerschensteiner's visit unquestionably did much to increase the already growing conviction as to the great importance and practical value of the day continuation or part-time school as an element in the future development of industrial education under American conditions, and it has been increasingly evident since his visit that the thought of those concerned with the development of this work in the United States is turning more and more in this direction.

Dr. Kerschensteiner's visit was followed closely by the fourth annual convention of the National Society for the Promotion of Industrial Education in Boston, November 17, 18, and 19. This convention was extremely encouraging in the interest shown through the large attendance and in the high order of the papers presented. On the evening of November 17 a banquet was tendered by the Boston Chamber of Commerce to those attending the convention;

and the governor of the Commonwealth, the mayor of Boston, the president of the Wabash Railroad, and a representative of the American Federation of Labor were among the speakers. The program of the professional sessions is given below:

Thursday, November 17, 1910: 10 a. m.

Demands and opportunities for girls in trades and stores.
- The needle trades.
- The department stores.
- What the schools can do to train for these trades.
- What more should the schools do to meet the demands.

2.30 p. m.

The training of teachers for girls' trade schools.
- New requirements made by the trade schools.
- Inadequacy of the present source of supply.
- What more can schools do to meet the requirements.

Friday, November 18, 1910: 9.30 a. m.

Apprenticeship and corporation schools.

2 p. m.

Part-time and evening schools.
- The Fitchburg plan.
- The Beverly Industrial School.
- The public schools and the apprentices of Cincinnati.
- The evening schools of Boston.
- Evening industrial schools of Massachusetts.

Saturday, November 19, 1910: 9.30 a. m.

The social meaning of industrial education.
The economic significance of industrial education.
Industrial education and the community.
The problem of industrial education as seen by an employer.
Labor's demands on industrial education.

Among the activities of the society during the past year has been the publication of the following bulletins:

No. 12. Legislation upon Industrial Education in the United States.
No. 13. Part I. Trade Education for Girls.
Part II. Apprenticeship and Corporation Schools.
Part III. Part-time and Evening Schools.
Part IV. The Social Significance of Industrial Education.
No. 14. The Trade Continuation Schools of Munich.

On account of the great confusion as to the nomenclature used in discussions on industrial education, the executive committee of the society has felt compelled to attempt the formulation of a brief terminology involving the more important distinctions. This terminology, which has been adopted by the committee, is as follows:

Vocational Education includes all forms of specialized education, the controlling purposes of which are to fit for useful occupations.

Vocational Schools in a broad sense include all commercial, agricultural, industrial, household arts, and professional schools with the above purposes.

Industrial Education denotes the field of vocational education designed to meet the needs of the manual worker in the trades and industries, including the occupations of girls and women carried on in workshops.

Agricultural Education is that form of vocational education which fits for the occupations connected with the tillage of the soil, the care of domestic animals, forestry, and other useful work on the farm.

Household Arts Education is that form of vocational education which fits for occupations connected with the household.

Manual Training is the training of the hand, especially by means of the tools which are used in various industrial processes, employed as an agent in general education.

Manual Training High Schools (Mechanic Arts Schools, sometimes called Technical High Schools).—Manual training had its beginning 30 years ago in secondary schools with four distinct avowed objects in view: (1) To educate the whole boy, to develop the entire area of his brain; (2) to lay a broad and appropriate foundation for higher education; (3) to enable a boy to discover his innate mental and physical aptitudes; (4) to furnish a broad basis for an industrial career should one's aptitude lie in the direction of the mechanical arts. It admitted only boys of 14 years or more who had finished the grammar grades—the average was about 15.

Manual training high schools are defined in the report of the committee on the place of industries in public education made to the National Education Association in 1910 as follows:

> The manual training high school, or the manual training school, is a school of secondary grade in which a greater or less amount of handwork is included in the curriculum and in which the greater part of the academic instruction is similar to that found in other high schools and college-preparatory schools, neither the manual nor the academic instruction being especially planned to be of direct vocational service.

It is evident that manual training schools as represented by the above definitions are not vocational schools as previously defined.

Industrial Schools include all special schools (*a*) that prepare for entrance into industrial employment and schools (*b*) that give supplementary instruction to those already engaged in such employment.

Trade Preparatory Schools (General Industrial Schools, Intermediate Industrial Schools, Pre-apprenticeship Schools).—Trade preparatory schools are schools that offer training for boys and girls between 14 and 16 years of age in practical industrial processes, including such drawing, science, and mathematics as will prepare them for entrance into the trades or industries as efficient beginners.

Trade Schools are schools that afford specialized practical training in manual trades, with the object of preparing for immediate prac-

tical work at the trade as a wage earner. Such schools aim to take the place of apprenticeship in whole or in part.

Technical Schools are schools giving training in practical industrial processes and which at the same time offer advanced instruction in the scientific and mathematical principles upon which these processes are based.

Technical High Schools are public schools of secondary grade having the distinct purpose of preparing pupils for industrial careers requiring scientific and technical knowledge beyond that needed by the skilled mechanic.

Continuation Schools.—1. Evening Continuation Schools. Evening continuation schools are schools attended by those already engaged in useful employment which provide instruction directly related to such employment. Such instruction may consist of either practical work, related subjects of study, or both.

2. Part-time Schools or Day Continuation Schools. Part-time or day continuation schools are schools for persons (commonly apprentices or other learners) engaged in useful employment, which give instruction supplementary to such employment during a portion of the working time of the pupils.

Cooperative Schools are schools conducted under an agreement between the school and an employing establishment, by which students entered in school are given opportunities for practical work in the establishment for a portion of their time.

Another important publication of the year in this field is the report of the "Place of Industries in Public Education," prepared by a committee of the National Education Association and submitted to the national council of that body meeting in Boston July, 1910. This report, after introductory papers on the "Industrial Factor in Social Progress," the "Industrial Factor in Education," and "Notes on History of Industrial Education in the United States," presents the findings of three subcommittees, as follows: (1) "On the Place of Industries in the Elementary School," (2) "On Intermediate Industrial Schools," (3) "On Industrial and Technical Education in the Secondary School." This report, which was signed by Jesse D. Burks, chairman; Charles R. Richards, secretary; Edgar S. Barney, Howard D. Brundage, Flora J. Cooke, Arthur D. Dean, William H. Elson, Carleton B. Gibson, Calvin N. Kendall, Ernest B. Kent, Charles H. Keyes, E. Euphrosyne Langley, Frank M. Leavitt, George A. Merrill, Charles H. Morse, Carroll G. Pearse, David S. Snedden, and Charles F. Warner, aimed at a valuation of the present tendencies in industrial education and a constructive study of the fields of work that lie most clearly within the province of public-school administration. Emphasis upon differentiated vocational work in the upper grades of the grammar schools, importance

of the intermediate industrial schools, and the need for definitely vocational high schools stand out as the salient features of the report.

LEGISLATION FOR INDUSTRIAL EDUCATION.

The year 1910–11 has witnessed a substantial advance in legislative and other practical measures looking to the development of industrial education in the United States. In Massachusetts, which has taken the lead in State activity in this field, important steps were taken during the year. Perhaps first among these was the passage of a new act by the legislature which has materially altered the conditions under which State support may be obtained by industrial schools. By the terms of the original act of 1906, amended in 1909, a community could obtain the assistance of the State toward the maintenance of industrial schools only by constituting an independent board of trustees to manage such schools. By the new act industrial schools may hereafter be established under the local school board, which has entire freedom to control such schools, provided they bear the burden of support. Such schools, however, may obtain the benefit of the State's aid and remain under the direction of the local board if they conform to the standards set up by the State board of education and are approved by that body.

Another important legislative action during the year was the passage of a resolve appropriating $7,000 for an investigation into the possibilities of part-time instruction for the State of Massachusetts. This investigation was placed in the hands of the State board of education, who are to make a report by January 1, 1913.

In January, 1911, the State board of education issued a report upon the problem of agricultural education in Massachusetts. The constructive feature of this report was a recommendation that part-time schools be established in which the pupil should devote a portion of his time to systematic work and tabulation of results upon a part of the home farm, leaving the school instruction to deal with the scientific principles involved, agricultural methods, and a study of the student's experimental results.

One of the incidental but valuable features of the report was a series of definitions as to the terminology of vocational education with a view toward an exact interpretation of such terms when used in cities of Massachusetts and in rulings of the State board of education. Of still further value in this direction is a bulletin published by the State board in September, 1911, defining in exact terms the standards as to school organization, courses of study, and methods of instruction necessary to secure the approval of proposed schools by the board and the award of State moneys.

Among the independent industrial schools started during the year in Massachusetts are the School for Printing in Boston, where another

and larger school for several industries is about to be opened; a school at Lowell dealing with the textile industry; a school for boys and one for girls at Somerville; a school for boys at Springfield; a school for boys at Westfield; and one for girls at Worcester. These schools are all of the preparatory trade-school type, taking pupils at 14 years of age, and are in addition to the important schools previously established at New Bedford, Beverly, and Worcester.

In connection with the independent trade school at Worcester, part-time classes were inaugurated during the year by which apprentice boys in the machine trade spend one-half a day of four hours each week at school. During this time they receive instruction according as they elect either in English, shop computations, drawing, and lectures on shop practices, or in practical machine work. This system has been in operation for about a year and some 57 boys have been enrolled in the classes. These classes are held during a portion of the working day in time paid for by the employer.

A number of industrial evening schools were also established under the control of the State board during the year in various industrial centers. Attendance upon these schools is limited by statute to youth over 17 years of age and to those who are employed during the working day.

One of the questions that has exercised the attention of the State officers in Massachusetts is that of extending the State supervisory control over students in cooperative schools during the period they are engaged at work in commercial shops. The State board is of the opinion that such control is extremely desirable, if not necessary, in order to insure the fullest efficiency of the combined theoretical and practical instruction afforded by such schools.

In New York State the education law has been revised during the past year and the law relating to industrial and trade schools passed in 1908 has had a section added which concerns "schools of agriculture, mechanic arts, and home making," open to pupils who have completed the elementary school course or who have attained the age of 14 or have met such other requirements as local school authorities may have prescribed.

Syllabi have been developed by the State education department for use in intermediate industrial schools covering the subjects of industrial and commercial geography, industrial arithmetic, mechanical drawing, and home making. Syllabi in farm mechanics, dairying, animal husbandry, farm crops, etc., have also been developed for the agricultural schools.

There are at present 35 industrial and trade schools in the State, employing 145 teachers, with a day enrollment of 3,370 pupils and an evening enrollment of 2,933 pupils.

The State has definitely undertaken to train teachers for vocational work. Recognizing the fact that no one type of school is competent to deal with the problem, this work is being carried on in three State normal schools. One of these institutions has an evening training school for mechanics who are fitting themselves as teachers. The emphasis in these teachers' courses is placed upon the planning of courses of work and equipment; upon instruction in shop mathematics, electricity, and mechanics; and, finally, upon methods of teaching industrial subjects. One of the normal schools has a course in training teachers of agriculture. The work of this school is not intended to rival that of the agricultural colleges, but to prepare teachers to carry on any of the scientific work related to agriculture outlined in the syllabus of the department.

Following legislation in Massachusetts, New York, and Connecticut, the State of Wisconsin has taken vigorous steps in this direction. In this State a commission upon plans for the extension of industrial and agricultural education, created by resolution of the legislature in 1909, submitted its report in January, 1911. In this report the commission analyze various practical measures calculated to reach and assist the great mass of young workers engaged or about to engage in the industries and agriculture. As a result of their investigations and deliberations the commission presented a very earnest and emphatic plea for day continuation schools and for compulsory attendance upon such schools. Their recommendation in this matter is as follows:

> That as soon as school facilities can be provided for children between 14 and 16 years of age already in industry they be compelled to go to school a specified time each week; that this time shall be expended as far as possible in industrial training; and that the hours of labor for such children shall not exceed eight hours per day for six days of each week, which time shall include the time spent by each student in vocational schools.

Other recommendations of the commission upon this subject are:

> That a temporary State advisory board for industrial education be appointed by the governor and that an assistant and other officers whose duty it shall be to supervise and encourage industrial education shall be added to the State superintendent's office, said assistant to be appointed by the State superintendent with the approval of the board of industrial education. That there be established in every community where industrial education is undertaken local boards of the same general nature as the temporary State advisory board, which board shall have similar control in their localities over industrial education and evening schools. That after careful investigation by the boards established for this purpose continuation schools, trade schools, and evening schools shall be gradually established in the State, and that State aid shall be given for these purposes, under strict limitations as to methods and in such a manner that all training given in such schools can be combined into a harmonious and economical system.

As a result of this report the Legislature of Wisconsin passed a number of acts which became laws May 19 of the current year. These laws provide that when any school board shall decide to establish a trade school or schools a tax not exceeding three-tenths of a mill upon the dollar shall be levied upon the total assessed value of property in the city and used for the establishment and maintenance of the trade school; that the apprenticeship laws of the State shall be amended so as to prescribe that every apprentice shall receive instruction not less than five hours a week in English, in citizenship, business practice, physiology, hygiene, the use of safety devices, and such other branches as may be approved by the State board of industrial education, and that such instruction may be given in the public school; that whenever any evening school, continuation class, industrial school or course shall be established for minors between the ages of 14 and 16 working under the local board, every such child shall attend such school not less than five hours per week for six months in each year, and every employer shall allow all minor employees over 14 and under 16 years of age a corresponding reduction in hours of work; that employers shall allow a reduction of hours of work at the time when the classes are held whenever the working time and that of the class coincide; that illiterate minors shall attend public evening or continuation schools; that no State aid shall be granted to any school for instruction in agriculture, domestic economy, manual training, or industrial branches unless the salary paid to every teacher instructing in such subjects be at least $60 per month; that a State board of industrial education be created, to consist of three designated educators, ex officio, and six appointed members, of whom three shall be employers of labor and three shall be skilled employees, and that this board shall have control over all State aid given under the act; that the State superintendent of public instruction shall appoint an assistant in the department of instruction, to be known as assistant for industrial education; that in every town or village or city of over 5,000 inhabitants there shall be, and in towns, cities, and villages of less than 5,000 inhabitants there may be, a local board of industrial education whose duty it shall be to foster and establish and maintain industrial, commercial, continuation, and evening schools, and that such board shall consist of the superintendent of schools and four other members, two employers and two employees, who shall be appointed by the local board charged with the supervision of the schools and who shall serve without pay; that no State aid shall be granted to any school under this act without the approval of the local board of education, and that no money appropriated by the city, town, or village for these schools shall be spent without the approval of the local board of education; that whenever 25 persons qualified to attend an indus-

trial, commercial, continuation, or evening school file a petition therefor with the local board of education, the board shall establish such school or schools or provide other facilities, as authorized in this act.

These legal measures represent the most pronounced recognition of the part-time continuation schools that has yet entered into legislative enactment. It goes without saying that the progress made by Wisconsin in developing this particular type of industrial education will be watched with great interest by the rest of the country.

Maine is a State not prominent in manufacturing which has also adopted measures for industrial education. The legislature of 1911 passed a "Special Act for the Encouragement of Industrial Education." Many of the provisions of this act look to the extension of manual training, household arts, and agricultural instruction in the elementary schools and in normal schools, but section 7 relates directly to the establishment of industrial or preparatory trade schools:

> The superintending school committee of any town when authorized by vote of the town shall establish and maintain as a part of the public-school system of such town a general industrial school for the teaching of agriculture, household science, the mechanic arts, and the trades. Such general industrial schools shall be open to pupils who have completed the elementary school course or who have attained the age of fifteen years. Such schools must be supported by funds raised in addition to the usual funds for the schools. The State will aid such a school to the amount of two-thirds of the cost of instruction, not to exceed $2,000 for any one town in one year.

The intention of the act seems to be largely to introduce vocational classes into the regular elementary and secondary schools of the State, with a moderate provision for the establishment of true vocational schools when authorized by a vote of the town.

In the new school code of the State of Pennsylvania there are certain provisions relating to industrial education. Article 4 authorizes the board of school directors to—

> establish, equip, furnish, and maintain the following additional schools or departments for the education and recreation of persons residing in said district, which said additional schools or departments, when established, shall be an integral part of the public-school district and shall be so administered, namely: High schools, manual-training schools, vocational schools, domestic-science schools, agricultural schools, evening schools, kindergartens, libraries, museums, reading rooms, gymnasiums, playgrounds, schools for blind, deaf, and mentally deficient, truant schools, parental schools, schools for adults, public lectures, together with such other schools or educational departments as they, in their wisdom, may see proper to establish.

A further article authorizes the State superintendent of public instruction to "appoint one expert assistant in agricultural education, one expert assistant in industrial education, one expert assistant in drawing."

Michigan passed an act during the year which empowers school districts to establish and maintain trade, vocational, industrial, marine, and manual-training schools, gymnasiums, and scholarships, but makes no provisions for State support.

Indiana has taken the important step of creating a commission for the investigation of industrial and agricultural education. This commission of seven was appointed in September by the governor, and has already effected an organization. It is to report to the legislature not later than January 1, 1913. The commission is to investigate the needs of education in the different industries of Indiana and to see how far these needs are met by existing institutions. It is to consider what new forms of educational effort are advisable. It is to investigate also, by means of printed reports and the testimony of experts, what has been done in other States and in foreign countries in similar educational work.

In New Jersey a law was passed, taking effect June 30, 1911, by which the State board of education is reorganized and providing that a State commissioner of education be appointed by the governor for a term of five years. The commissioner has power under this law to appoint four assistant commissioners, one of whom is to devote his time to the inspection of industrial education, including agriculture.

An industrial bill was introduced into the last session of the California Legislature providing that "special and technical training may be given in the mechanical arts, industrial trades, agricultural and horticultural pursuits, and domestic science, in the grammar grades of the elementary schools and in the secondary schools of this State." This bill was vetoed by the governor on the ground that there was a question as to the available funds for inaugurating the system proposed, and, furthermore, that the plans may be beneficially matured before becoming a law.

RECENTLY DEVELOPED TENDENCIES.

There is no question but that the thought of all interested in the problem of industrial education is becoming measurably clearer as to ways and means best adapted to American conditions. While the question of methods is very far from being settled, it is evident that the experience gained during the last five or six years is being evaluated and some important deductions drawn. It is being more and more appreciated, as actual results are studied, that economic quantities are the controlling elements in the situation and that only those measures are practical for wide application that take full account of these quantities.

In attempting a brief summation of the experience of the past few years and the tendencies of the present, the writer would offer the following: The institutions that at present occupy an important

place in industrial training in this country are the intermediate industrial or preparatory trade schools, the trade school, the evening school, the part-time school, and the corporation or apprenticeship school. The economic factors involved in the conduct of these institutions are of two kinds: First, the expense of plant, operation, and cost of materials; and second, the matter of expense involved in attendance on the part of the student. Of these the second is probably the more important in determining the practical possibilities of a school type.

The first-mentioned school is a comparatively new type of institution aiming to reach some of the large number of boys and girls that leave the elementary school at 14 years of age, and to supply a training that will give them a better equipment to enter industrial life at 16. Such schools take their students at an age when the question of wages is not so generally important as later on, and when many parents are willing to support their children at school for one or two years if convinced that practical benefits will follow. There are at present in Massachusetts and New York some 10 or 12 of these schools devoted to the woodworking, electrical, bookbinding, printing, and machine trades.

Taking into account the practical benefits afforded by such schools and the possibilities of attendance by a considerable number of boys and girls well fitted to become industrial wage earners, and the not prohibitive cost for large communities, it is probable that such schools will become an important factor in industrial education in towns with large manufacturing interests and over 50,000 population, and that in time they will reach a considerable fraction of those boys and girls that now leave school at the end of the compulsory school period. From the character of training required and the close articulation with the elementary school, it is apparent that such schools are best fitted for administration by public-school authorities.

The trade school taking youths at 16 years of age or over, and furnishing a training to take the place in whole or in part of the apprenticeship system, is an institution which labors under the severest economic difficulties, whether considered from the side of maintenance or expense of attendance. Figures from schools now in operation indicate a grade of expense that obviously makes such institutions prohibitive for any except large cities, representing exceptional specialization and concentration of industries; and even in such cities it is too early to prophesy that the results obtained will be permanently considered in proportion to the expense.

Evening schools represent the first form of industrial education in this country, and they reach to-day by far the largest number of individuals under instruction in this field. As a means of supplementary instruction in mathematics, science, drawing, and technical subjects,

they present a simple and effective method of industrial education, at least for young men above, say, 18 years of age. Taking the young worker after the wage hours of a day are closed, such schools and classes represent the most easily available form of industrial education for the great mass of young workingmen and the simplest types from the standpoint of organization. Practical evening classes which afford an opportunity to broaden the shop experience of the day stand in the same relation to the worker, but they offer a more severe problem in expense of administration.

Evening continuation schools were for half a century the backbone of the German system of industrial education. To-day that country is coming to a realization that for students between 14 and 18 the evening is not the best time for instruction, and she is bringing the work of her continuation schools into the day period. It will naturally require a considerable time for this country to reach the same point and to bring about a general agreement among manufacturers to allow learners in their establishments to attend industrial improvement schools during working hours. The positive benefits that result when such a plan is followed, and the close correlation that is made between the work of the shop and that of the classroom, have, however, been so strikingly shown that this system of industrial education deserves to be increasingly studied by both employers and schoolmen. When the time for attendance upon the school work is granted to apprentices or other learners by employers and the wages continued during this period, the economic problem for the boy is solved, and inasmuch as the public school is not called upon to supply the costly equipment for practical work, but only that instruction specifically fitted to the technical needs of the learners, the administration expense is reduced to a minimum.

In its beginnings such a plan is evidently most readily applied in cities and other localities where the concentration of high-grade industries gives a large number of apprentices or learners in a comparatively few lines. The application of such a system to low-grade industries and to cities of varied manufacture is evidently much more difficult both as an educational problem and as a matter of organization, but it does not seem unreasonable to expect that with increasing public support and cooperation of the employers a gradual and steady extension of this plan of education will result.

Another type of part-time or better cooperative school also demands serious attention, viz, the type in which the initiative is taken from the school side and high-school students are given opportunities to spend half their time at work in industrial establishments and half at school. Such a system gives a larger amount of time to general education, but although very promising results have been obtained

from experiments in Fitchburg and Beverly, Mass., it still remains to be seen whether such schools will become an important factor in supplying a large number of workers to the industries.

The apprenticeship or corporation school is a part-time school of the first type, in which both practical training and instruction is given within the commercial establishment. Where the industrial corporation is of great size, it is probable that this method, which allows a maximum of coordination between both lines of instruction, will be increasingly adopted, but for a great majority of industrial establishments such a plan is hardly practicable, and division of labor between the employer on one hand and the public school on the other is the method that seems to make for the greatest efficiency and economy.

CHAPTER VIII.

A SCHOOL FOR HOME MAKERS.

By L. D. Harvey,

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The Stout Training School for Teachers of Domestic Science and Art was established in Menomonie, Wis., in 1903. The demand for the graduates of that institution as teachers of domestic science and art in the public schools has shown an awakening of public interest to the importance of these subjects and to the necessity for definite instruction in them beyond what is afforded in the home.

The time limit likely to be placed on these subjects in the public-school curriculum for some years to come, even under favorable conditions, will necessarily confine the instruction given to the elementary phases, and valuable as it will prove, it will not fully meet the needs of those who wish to make thorough preparation for the responsibilities imposed by the care of the home.

Experience in the administration of the training school disclosed the fact that there are many young women who do not wish to take the technical and professional training necessary to fit them for teaching, but who would be glad to avail themselves of the opportunity for the acquisition of the practical knowledge and training which a high-grade school for home makers should offer.

A realization of this demand and a deep-seated conviction of the importance of this phase of educational effort, coupled with a recognition of its close relation to the lines of educational work already successfully inaugurated in Menomonie, led to the decision to open such a school in that city in September, 1907. The organization of the school was made possible through the public spirit of Hon. J. H. Stout, whose deep and practical interest in various phases of industrial education in elementary and secondary schools is well known.

The character of the work done by the students who have completed the course, their estimate of its value, and the favorable judgment expressed by scores of intelligent men and women from all parts of the country who have visited the school, studied its plan of organization, and observed its work, all combine to approve the action of its founders in organizing the school.

No attempt has been made to secure a large attendance, because much of the work has been in untried fields, and while it was being

organized it was felt that better results could be secured by the individual student if the attendance were limited than with a larger number of students. This policy must be continued chiefly because of the rapid growth of the other departments of the institute and the consequent limited accommodations available for the home-makers' school. It is hoped that in the near future new buildings may be provided, thus making it possible to remove the limit on attendance.

BASIC CONSIDERATIONS.

Economic, scientific, artistic, and ethical conditions are involved in the making of a home. Within the home the children are reared; its influence and the environment it creates are the potent factors in the development and shaping of the life of all members of the family and in determining their usefulness as members of society and as citizens of the State. The family is a business organization, the social unit, and an ethical force. The making of the home tests the efficiency of the family as a business organization, fixes its character as a social unit, and determines its potency as an ethical force.

The woman is an administrative officer of the family as a business organization; the man should provide the funds for carrying on the business of home-making; the woman should disburse these funds in such a manner as to secure the desired results for the family and the home. The best results can not be secured in this organization unless both the man and the woman perform their respective functions with the highest degree of efficiency. The function of neither can be performed without adequate preparation.

Society has provided, and is providing more and more completely, the means through which the man may secure proper preparation for the successful discharge of his function as provider for the family through his skill as a worker in the professional, commercial, or industrial field of activity. Professional schools, commercial schools, technical schools, and trade schools are being organized in increasing numbers to provide the training necessary for increasing the earning capacity of the man.

Society has failed to recognize what an important factor the woman is in the family as a business organization; has not appreciated the variety and extent of the demands made upon her in the proper administration of household affairs, and therefore has failed to realize the importance of providing means for her training for efficiency in the home. The schools open to her, however comprehensive in their courses for formal discipline and cultural values, have made little or no provision for a consideration of those subjects which are of vital importance to the woman who is some day to assume the responsibility of making a home for herself and her family.

If her mother possesses the necessary knowledge of economic, scientific, artistic, and ethical principles underlying the wise administration of the affairs of the home, the necessary technical skill in applying these principles, ability as a teacher, inclination to teach her daughter, and time and strength for her teaching; and if her daughter, after the discharge of her school and social duties, has the strength, time, and inclination to profit by her mother's instruction, well and good. In very few homes in this country, however, do these conditions exist, and therefore few of the girls in these homes are getting the training so essential for the success and happiness of their lives and of the lives of others in the home.

In most cases the girl goes from the school with such a stereotyped academic training as opportunity and application have given her, but this training has touched but lightly, if at all, upon the vital affairs of her life; has fitted her but slightly to enter a new home and become an active partner in its business organization; to assume at once the cares, duties, and responsibilities of the home maker. From a life of limited responsibilities and cares she passes at once into another whose responsibilities fail to appall her, solely because of her ignorance of what is involved in the change.

In attempting to set forth the work of this school it is deemed best not to give the details of the course of study, but rather general statements as to the scope of women's activities in the home and the demand made by these activities for instruction and training for their proper performance.

In working out the details of the course of study as administered in the school the following plan has been pursued: The most important activities demanded of a woman because of her position as a home maker were enumerated and classified so far as their interrelation made such classification possible. An attempt was then made to answer the question, "What does a woman need to know and to do for the proper performance of each of these activities?" The answer to this question in each field of activity indicated the scope and character of the course of study for that field. This plan makes it possible to concentrate upon the essential things and to eliminate the nonessentials. It is probable that if time permitted the course of study in each particular field might be considerably elaborated with an addition of cultural value, although it is believed that there is high cultural value in every detail of the work regarded as necessary. In the main, effort has been concentrated on the essentials. The course in home and social economics is perhaps the only one in which there has been a development of work beyond the essentials into the field of what would be *desirable* because of its effect in broadening interests and giving a wider outlook on woman's rela-

tion to the home and society and a larger appreciation of her opportunities and responsibilities.

SCOPE OF WORK OFFERED.

In considering the duties of the home maker it will be seen that they are concerned with or group themselves about certain industries in the home and certain forms of activity. These activities may be classified as those connected with the provision and maintenance of a suitable shelter for the family; those that concern themselves with the nutrition of the family; those that provide suitable clothing for the comfort of the family; those that have to do with the care of the dependent members of the family—children, invalids, and aged persons; and those that have to do with the social, industrial, and ethical relations of the members of the family to each other and to other members of society.

The following general discussions will serve to show the relation between the various arts, sciences, and economic features that are included in a course of study that of necessity is so comprehensive. For convenience in arrangement the subjects are grouped under the following heads: The house, food study and cooking, clothing and household fabrics, care of children, home nursing and emergencies. home and social economics. The details of the course of instruction will have to be omitted for lack of space, but the general scope of the work as given will show that it is planned for the purpose of fitting young women to superintend their homes intelligently in all the relations of these homes to the individuals within them and to the society of which they are a part.

THE HOUSE.

It is impossible to consider the house that shall shelter a family as a thing apart from the home that it represents. So intimate is the relation between the outward and visible manifestation and the inward and spiritual grace which seeks expression in the arrangement and fitting and management of a home that the real spirit of the family is usually shown in the material things of the house. Possibly nothing exerts a greater influence upon the intellectual and moral development of a people than the character of the homes in which they live. When to this is added the physical effects produced by correct or incorrect housing, the desirability of having the organization and management of the average home supervised by an individual who has initiative power and the ability to plan and direct its affairs becomes apparent.

For convenience of consideration, this general subject may be subdivided into house sanitation, house decoration and furnishing, and house management.

HOUSE SANITATION.

The study of house sanitation is dependent for its greatest value upon an understanding of the sciences of chemistry, physiology, physics, and bacteriology, and an appreciation of their application to such subjects as the heating, lighting, ventilation, and plumbing of the house. The sanitary requirements in the way of house location, in obtaining pure water supply, and in maintaining absolute cleanliness of surroundings, as well as the furnishings and materials in the house, have their source in scientific principles that should be applied in the locating or selecting, planning, and care of the house. A definite study of the application of these principles to actual conditions as they exist will go a long way toward improving the health conditions of the country.

HOUSE DECORATION AND FURNISHING.

House decoration and furnishing is a subject that has only recently claimed the attention of the average individual. The ability to create a harmonious environment has been considered a special gift to the few. The majority, through lack of training, have had to content themselves with existing conditions that have often violated every principle of good furnishing and artistic decoration. To-day it is realized that the woman who is to plan and furnish a house needs some instruction that will be of use to her in creating a home where beauty and harmony and perfection of form shall produce an environment conducive to right living. That this may be accomplished a course is offered in design, color, house planning, decoration and furnishing, and the opportunity provided for practical application in all lines of art relating directly to home making.

HOUSE MANAGEMENT.

The organization of a course of study in house management is practically impossible unless there be opportunity for direct application of the principles taught. This application may be obtained under existing conditions in the cottages where the young women live during the school year. That the full benefit of experience may result, there is a definite course of instruction in each of the phases of home management and such actual performance of duties as may be necessary to a thorough understanding of the principles involved. These duties are so varied that they include most lines of activity found in a home, but in the correct organization of such varied duties each assumes its proper proportions, and the result is a well-regulated system for the performance of the business of the household.

BUSINESS MANAGEMENT IN THE HOME.

The value of a broad training that will fit women to discharge the business of their households, that will assure them adequate results for money expended, and give them a better appreciation and estimation of values can not be too strongly urged. The proper apportioning of the income among the different lines of home expenditures, the systematizing and keeping of household accounts, the selection of materials for the home, the organization and division of labor, the question of domestic service, are all topics considered in their economic relations in the theoretical discussions of the subjects and in their practical application in the supervision and care of the home makers' cottages which is a part of the regular second-year course.

FOOD STUDY AND PREPARATION.

The problem of providing suitable food for a family, when solved, means approximately perfect nutrition. This should result in normal and vigorous physical development, giving a sane and healthy outlook upon life and an opportunity for the development of the higher powers of the intellectual and moral life.

This selection of nutritives is the problem that confronts every woman who has others dependent upon her for daily food, and, of all the problems connected with the management of a home, is probably the most persistent, the most difficult of solution, and the most disastrous in its results if incorrectly solved, or as is often the case, its solution is not undertaken at all. There may be a vast difference between satisfying the hunger of the members of a family and supplying them with the right kinds of food to satisfy the various needs of their bodies. That the greatest influence of perfect or imperfect nutrition is operative at a period of life when the young person is dependent upon others for care is an added reason that those having homes in charge should understand the science of nutrition, its practical application, and the influence that it exerts upon the welfare of the members of the family.

The practical situation that presents itself is, how to provide the best possible food for the family with the means at hand. In other words, how shall she secure for the family the foods best suited to the various activities of each individual that will be palatable, attractive in appearance, and in cost in accordance with the amount that should be expended by that family for food? A theoretical treatment of the subject which does not result in an answer to this practical question does not give to the inquirer the assistance that she needs and does not result in any particular elevation of the general standards of nutrition. If, however, enough application can be com-

bined with a thorough understanding of the scientific principles underlying correct nutrition to give an idea of the practical value of a course in food study, the usableness of the knowledge becomes apparent and a better general use of foodstuffs should be the result. The subject matter will naturally fall under two main divisions:

1. The sciences, or fundamental principles.
2. The arts, or practical application.

The sciences to be considered are chemistry, biology, physiology, and dietetics.

CHEMISTRY.

The course in chemistry includes a study of the simple elements of general chemistry necessary to a comprehension of the relation of this science to the care of the home and its occupants. This relation is shown in a study of food composition, food combinations, chemical processes in the preparation and digestion of foods, food adulterations, the determination of food values, and the chemical processes involved in the cleaning operations in the home—soap making, removal of stains, cleaning of metals, woods and wood finishes, general laundering processes—in relation to fabrics, in the study of dyes and their influence upon quality and durability.

BIOLOGY.

A study of the influence of plant and animal life on food material, of the production and storage of food material on plant and animal tissue, and of bacteriology in its relation to food preservation and to the preservation of health. Household bacteriology invites a study of physical and chemical changes induced in food products by the growth of molds, yeasts, and bacteria, a study of the conditions necessary for this growth, and a consideration of these organisms from the standpoint of house sanitation. It also includes a study of bacteria in their relation to disease—sources of infection, types of infection, the principal infectious diseases, personal and household disinfection.

PHYSIOLOGY.

A study of the uses of food materials in the body—digestion, assimilation, storage of energy, excretion of waste materials; a study of the influence of hygienic living upon physical well-being—correct food, exercise, rest, sleep, regularity of habit, cleanliness, correct clothing, and proper general habits of life; an application of the principles of physiology and hygiene to the physical improvement of individuals in the home and to health conditions of the home itself.

DIETETICS.

A study dependent upon a knowledge of chemistry, biology, and physiology, in which is considered the suiting of food substances to the particular requirements of the body in health and disease, the influence of age, climate, and occupation upon the kind and amount of food used and upon its manner of preparation.

The practical application of this course is made in the planning of dietaries suited to different conditions, the working out of the balance of food materials found in each, the actual weighing, preparing, and serving of the dietaries to test their practical character and to verify the amounts used.

SELECTION OF FOOD MATERIALS.

The selection of food materials involves a decision as to the amount of money to be expended upon food, a study of the markets and available foodstuffs, a knowledge of manufacture and methods of production in their influence upon the character of foods, a knowledge of the food value of various foods, and the ability to substitute less expensive materials, having the same food value, for the more expensive ones. A definite course in marketing, combining the selection of materials with the keeping of household accounts, will constitute a part of the course of the senior year. This will be conducted in connection with the supervision of the cottages and the planning and ordering of the meals, and will continue for such time as is necessary to gain some proficiency in this particular line of work.

CARE OF FOOD MATERIALS AND FOODS.

The correct care of food materials before preparation, and of foods after preparation, means an enormous saving in expenditure for food materials and a saving in actual food value in the materials themselves. This involves a knowledge of the action of yeasts, molds, ferments, and other forms of bacteria, and the ability to apply the scientific principles underlying practical food preservation.

PREPARATION OF FOOD.

The actual preparation of food, if it is to be of highest value, must be considered with reference to its effect upon the food value of the materials used and with reference to the particular use to which they are to be put. This naturally requires a consideration of suitable food combinations and the actual preparation of foods. This preparation includes the application of the principles of cookery to the foodstuffs that are in common use in the average American home. Special emphasis is placed upon the preparation of palatable and

attractive foods from the less expensive materials. The combination of these foods into meals gives experience in actual practical preparation and is continued until a sufficient degree of efficiency has been acquired. A course in invalid cookery, supplementary to the study of home nursing, is included in the advanced work in cookery.

SERVING.

Serving is supplementary to cookery and in addition to the regular serving of simple meals includes the serving of luncheons, dinners, and meals of ceremony and entertainment, the decoration of tables, duties of host, hostess, and waiter, and the entertainment of guests. Opportunity to gain skill in serving is given in connection with the discharge of regular duties in the care of the cottages. All such work is conducted as regular class exercises and under the direct supervision of the director of the department.

CLOTHING AND HOUSEHOLD FABRICS.

CLOTHING.

The problem of selecting fabrics and combining them into garments and articles for the use of the household is one that requires training in the knowledge of materials, their wearing qualities, their real, not their apparent values, their care, and their combination as to color and quality. Skill must be developed in the use of materials and in making or directing the making of common household articles and clothing for the family.

In considering the clothing for the use of the family such attention must be given to hygiene as will result in the selection of materials and shape of garments that will aid instead of impeding physical development; attention must be given to color and form, harmony and appropriateness, that the clothing may be suited to the physical peculiarities of the individual for whom it is planned, adapted to the peculiar uses of the individual, and attractive because of its appropriateness for use by the individual. The comparative cost and quality of fabrics must also be studied, that the expenditure for clothing may be in proportion to the expenditure for other necessities, and that correct standards for this particular phase of expenditure may be established. The repair of clothing is also a problem that needs careful attention, for, unless proper care is taken of the wearing apparel, much money is uselessly expended and little satisfaction and comfort result from it. The care of clothing when not in use affects materially its durability, correct storing being absolutely necessary to secure the full wearing value. The actual cutting, fitting, and making of clothing demands a skill and judgment that come only with experience and practice.

FABRICS USED FOR DECORATIONS AND FURNISHINGS.

The selection, construction, and care of other fabrics used in the household demand attention along the the same lines as the selection of clothing, with an additional emphasis upon the possibilities of applying a knowledge of design and color to the construction and decoration of draperies and other articles of furnishing.

The course to be effective must include a study of textiles, design, and color; practical application in the selection of materials; the fundamental principles of sewing, mending, and repairing; the making of plain garments, children's clothes, etc.; the designing and making of dresses and hats; the making and marking of household linens; the uses of embroideries and fancy needlework; and the application of needlework to various forms of household decoration.

THE CARE OF CHILDREN.

A thoughtful observer must realize that every child who does not receive good care during the formative period of his life is seriously handicapped physically as well as mentally and morally in after years. That this handicap results from the ignorance or indifference of those upon whom he is dependent does not make the struggle that he must undergo any less nor the difficulties any easier to surmount. His competition with others of his kind is keen; and if he is not equipped for it, he must suffer from it as surely as though through some fault of his own. That the child has a right to the care that will prepare him for his life work, whatever it may be, everyone will admit. The difficulty is to assure this care to the average child in the average home. The one solution of this difficulty would seem to be a definite and systematic course of instruction for young women that will aid them in fitting themselves to discharge the duties that devolve upon those responsible for the care of children.

This course includes a study of child nutrition; of the hygiene of childhood, including bathing, clothing, amount of sleep, exercise, amount of pure air, regularity of habit, absolute cleanliness of the individual and the environment; the consideration of infant diseases and emergencies; and the selection, making, and care of clothing. It also includes a definite and distinctive study of child psychology in order that there may be an understanding of the stages and the mental development of the child; of the value of the creation of correct ideals; of the force of will power well directed; and of the value of the formation of correct mental and moral habits, no less than an understanding of the physical necessities of childhood.

The varying and developing ethical code of the family is noted from the time of the primitive family to the present, the training of

the primitive child for self-protection only and of the modern child for virtue as well. The subject of virtue is considered in so far as it requires a certain choice between two lines of conduct and the exercise of the will to carry out the end chosen.

The child's instincts and interests are determined, the child's imagination with its relation to truth telling and deceit, the formation of right habits, the development of a child's will power, the question of obedience and of punishment, the child's play and its relation to its mental, moral, and physical development are each considered.

In connection with the study of children's literature the following topics are studied:

1. The different classes of children's books.
2. The interests and values of each class.
3. The art of story telling.
4. A brief sketch of the history of children's books.
5. The art of leading the child from a certain interest in reading to a related line of reading.
6. The tests of a wholesome and healthful book for children of varying ages.

HOME NURSING AND EMERGENCIES.

No home training is complete without attention to the care of invalids and dependent members of the family in the home. This involves a knowledge of simple maladies that may be treated at home and of the use of simple household remedies, the care of the sick room, care of the bed, care of the patient, giving of baths, the use of antiseptics, disinfectants, and deodorants. For emergencies the instruction will include the usual requirements in caring for cuts, burns, swoons, poisoning, and accidents of various kinds.

HOME AND SOCIAL ECONOMICS.

The course in home and social economics has been developed with the idea that woman sustains ethical, social, and industrial relations with the other members of the family and with the members of society outside her home. These relations exist because the home and society exist as distinct organisms with definite functions, and because woman is necessarily a part of each of these organisms. These relations entail responsibilities. That woman shall effectively discharge these responsibilities is of the highest importance to her, to the home, and to society.

The first condition of wise and effective action in this field is a knowledge of existing conditions, wherein they need modification, and how such modification may be effected. The acquisition of that knowledge involves a course of study of social needs and possibilities;

of customs in the family and in society; of industrial organization, and of the relation of the family to this industrial organization; of ethics or the moral obligations of the members of the family to each other and to society, and especially of the moral obligation of the mother to her children and to the community in which she lives.

The work in this course begins with a discussion of the meaning of the term, "home and social economics; the importance of the study of the same; the former low popular estimate of the importance of the art and science of homemaking; and the causes and evidences of the changing estimate of to-day.

A discussion of the evolution of the house and home then follows, of the evolution of home concepts from that of the home as a temporary abode for the purpose of shelter from the elements or of protection from wild animals, to the idea of home embodying the concepts of comfort, privacy, sanctity; as a place for the development of household instincts; of mutual service to those related by the ties of blood, as a place best fitted to minister to the physical needs and the moral welfare of child life.

This is followed with a detailed study of the family. This topic includes a consideration of the evolution of the family or family community; of woman's social and industrial status, and hence her duties in the family at various stages of the development of the human race; of the early purposes of marriage; of the evolution of other and nobler concepts which dignified the marriage bond; of the reciprocal duties of the members of the same family; of the effect of family life upon the characters of man and woman; of the family as a necessary basis of social order; of the old-time ties and the modern ties which bind members of the same family together; of modern industrial conditions which affect family life; of the modern problems of family life.

The study of the welfare of the child in the family includes the problem of the child's heredity, of his environment and his ethical training.

The question of heredity involves a consideration of the birth rate of defective children, and of statistics concerning delinquent children; of infant and child mortality; of the racial poisons, of inheritable diseases; of the inheritance of criminal tendencies; and, in consequence of the above, of the importance of the woman's rejection of an unfit mate or the acceptance of a fit mate who will be a fit father for prospective children.

The matter of environment involves the following: What constitutes a right home environment; illustrations of wrong conditions of home environment; the mother's ignorance of, indifference to, or helplessness to obviate these conditions. The school life of the child, his reading, his associates, his amusements and the presence or absence of

civic cleanliness, of civic beauty, of civic morality make up to a great extent the environment of the child aside from his home and family life.

Consequently, consideration follows of actual relations which exist between the home and the school, of possible ideal relations, a study of places where better relations have been attempted and established.

Woman's industrial relations to the community outside of the home indicated the selection of the following: Man's and woman's place in industry in primitive life; the evolution and division of labor on sex lines; the passing of certain lines of what was formerly considered woman's work into the hands of men; the specialization and organization of former home industries outside the home; the modern entrance of woman into the industrial world outside the home; the effects of the entrance of woman into modern industrial life upon her character, the quality of her work, her relations in her home, and upon child life.

Again, the entrance of woman into modern industrial life has affected the standard of wages and man's choice of occupations, has to a certain extent begun to humanize certain industrial conditions, has affected the social relations of man and woman, has stimulated the public conscience with respect to present lamentable conditions of child life, has originated expedients and plans for ameliorating wrong conditions, and has stimulated the study of industrial and social problems.

Woman's industrial relations in the home determined the following choice of topics:

(1) Household industries.

(*a*) Order of appearance.

(*b*) Arrested development and suppressed specialization.

(*c*) Consequent effect upon the character of woman.

(2) Number of arts and crafts involved in the management of the primitive household compared with the number of arts, crafts, and sciences involved to-day.

(3) Limitations of a woman's knowledge of the arts, crafts, and sciences in the management of a properly conducted home to-day.

Woman's industrial relations in her home must also be considered from an ethical standpoint in so far as her failure or success in carrying out the varied lines of her household duties affects the health, the happiness, the comfort, and, hence, the character of the various members of her family. This means the selection for study and practice of certain sciences and arts for the wife and mother to properly administer to the health, happiness, and comfort of the different members of her family.

The "servant problem," as it affects the household's health and comfort to so appreciable extent, is studied under the following heads:

(1) What is the "servant problem"? (2) Reasons for prevailing conditions of household service from the standpoint of both "mistress" and "maid." (3) Attempts to better these conditions, and failure of these attempts. (4) Suggested solutions of the problem.

As the family is the largest consumer of industrial products, and as the wife and mother is the purchaser for the family, the family is involved in certain industrial and ethical relations with society. With this thought in view the following subjects are considered: (1) The growing needs and desires of the family and their effect upon the spirit of avarice on the part of the producer, the manufacturer, and the merchant. (2) The consequent effect upon the quality and quantity of products and the relations between employers and employees. (3) The unconscious false teaching in the family because of the family's attempt to compete with families of greater means. (4) The setting up of false standards of worth and of social success.

Woman's chief economic function to-day is the spending of money. Woman's relation to the community as chief purchaser of the world's products is of great and vital importance to her family and to society, because she establishes standards of life for the larger part of society, and determines to a large extent the quality of commodities produced in the industrial world. This topic is discussed with the class in the following order:

(1) Rights of the purchaser—
  (*a*) To buy articles that are as represented.
  (*b*) To buy articles uncontaminated by filth and disease germs.
  (*c*) To buy articles which are not produced under unhappy conditions capable of amelioration.
(2) Rights of the producer—
  (*a*) To produce articles under the best conditions possible.
  (*b*) To produce articles of a high standard of excellence.
(3) Some typical purchasers—
  (*a*) Ignorant of conditions of production.
  (*b*) Indifferent to conditions of production.
  (*c*) Unable to find out true condition of production.
  (*d*) Lacking any intelligent study of the art of buying.
(4) Principles to guide the purchaser—
  (*a*) Relations of the cost of living to the various lines of outlay.
  (*b*) Relation of amount of expenditure to the size of the family pocketbook.
  (*c*) The responsibility of the purchaser to the producer.
  (*d*) The responsibility of the purchaser for the health, comfort, happiness, and character of the individual members of the family.

Woman's social relations with the members of her family determine the following topics: (1) The different types of the mother and wife; for example, the family drudge and servant, the home organizer and the disciplinarian, the so-called society woman, and the sympathetic friend and companion, or the combination of two or more of these types in one. (2) The qualities and training necessary to fulfill the duties of each of the above types.

Woman's ethical and social relations to society at large are receiving a large share of the modern woman's attention. The growing wealth of different communities, the application of modern inventions to home industries, the passing of many of the former lines of women's work into the factory, have brought to many women leisure which should be spent in social service. Hence, an attempt has been made to select problems in civic life which seem to be a part of the duties of women. Civic cleanliness, the humane treatment of children, the "city beautiful" movement, civic morality, which means the protection of children from immoral influences, the modern slum and tenement, child labor, the organizations to protect neglected children and to reform juvenile delinquents—all these questions are legitimately within the province of motherhood, and the serious study of one or more of them and the attempt to improve conditions are among the duties of the modern woman.

This course then aims to make a serious study of women's clubs and organizations—their history and aims, their development of new and nobler purposes and lines of work, their successes and mistakes.

From the many social problems of interest different topics have been selected for special research and study with different classes; for example, the work of the consumers' league in their attempt to teach the art and ethics of buying; the work of the State and of local communities, of public and private philanthropy to better the conditions of child life in slums and tenements; a perspective or brief survey of the attempts made to improve social conditions which need study and improvement.

IMPORTANCE OF THIS COURSE.

As the study of the course outlined in home and social economics consumes an appreciable part of the time devoted to the work of the school curriculum, the question arises whether this branch of study has results commensurate with the amount of time and energy and thought expended, in comparison with other branches of the school curriculum.

Homemaking, the bearing, rearing, and training of children will be a large share of the life work of the majority of women. Hence a question that confronts the woman in the home and requires the most serious consideration is how to correctly care for and rear the

children in that home. In answering this question she is not responsible to herself alone nor to her immediate family, but to society at large—to the entire social structure. The primary purpose of a home, with all that it stands for in the way of opportunity for development of moral fineness of fiber, is to definitely provide surroundings and conditions conducive to the greatest possible mental and moral growth of the inmates of the home, particularly of the children. Anything that interferes with this growth interferes with the true function of the home. Anything that furthers it is a benefit, not to the family alone, but to all mankind.

Owing to the organization of society, the creation and maintenance of this environment and the care of the individuals developing in it fall largely upon the woman in the home. Considering the seriousness of this undertaking and the fact that the responsibility of caring for children in their early life usually comes to women young in years and experience, it would seem that some preparation other than the mere intuition of motherhood should be secured to aid in the discharge of this great and vital responsibility.

When we consider that one-tenth of the children born alive are defective and that of the remaining 90 per cent, one-third die before the age of 5 years, the justice of the child's right to be well born—that is, physically fit—can not be denied. When we consider the number of delinquent children, the right of the child to be well born—that is, free from criminal tendencies, and to be reared in a fit environment—can not be questioned. The girl must be made to realize that she can not enter lightly upon the duties attendant upon marriage and family life with no conception of her responsibilities in the matter of determining a mate to be the fit father of her children; with little motive for marriage but the desire to be protected, or to escape the necessity of earning her own livelihood; with no conception of the gravity of her step in its effect for good or evil upon the next generation; with no preparation whatever for her new life beyond the so-called instinct of motherhood. Hence, the course in home and social economics includes the study of the topics called heredity, environment, and the moral training of children.

The study of the family, its enlarging functions and purposes, its importance as a social unit making for social order, its effect for good or evil on the standards and ideals of the community, its effect on the development of certain virtues and emotions induced by the relations of the members of the family to each other, the conditions affecting the stability and purity of modern family life, the duties of the father, the mother, and the child in the family will insure the woman's keener realization of the supreme place of the social unit, the family, in the life of a child and of a people.

The girl's conception of what a home means and of what a home should be must not be vague, undefined, or narrow. A comparison of the meaning of the word "home" to the primitive man, with the varied and noble concepts which were born with the advance of civilization and the evolution of ethical ideas may give the home-maker a truer and deeper meaning of the term homemaking, a broader idea of her duties, a keener realization of their importance.

A consideration of the causes of the former low popular estimate of household duties and industries, and an understanding of the causes and evidences of a changing estimate to-day, will enforce the growing dignity of woman's household work.

Woman has little recognized the influence of her responsibilities as a purchasing agent, not only upon the health, the comfort, the happiness, the standards of her own family, but also upon the standards of the community of which she is a member. To many a woman it would be a revelation to realize that in her capacity as a purchasing agent she determines the quantity and quality of the world's commodities; that what she purchases and from where she purchases determine the very conditions of production, as illustrated in the manufacture of sweatshop goods, of adulterated textiles and foods, for example. Hence the attempt to make the girl realize that the wise expenditure of the family income is not only an art to be studied, but a vital question in the field of ethics as well.

Woman has far more privileges and opportunities to-day than ever in the past. She is no longer, in civilized communities, treated as a chattel, or a dependent, or a toy, or a drudge with few rights or privileges, with little freedom of choice or the liberty of determining a line of action. Her social freedom, her added privileges, her opportunities to be educated, her greater amount of leisure, due to the diminution of the number of the household crafts, have all brought with them new opportunities and new responsibilities in her ethical and industrial relations to society. The new and increasing problems of social and industrial life need the woman's point of view as well as the man's, her serious study and earnest work.

Therefore, topics dealing with modern social problems have been selected to influence the girls of to-day to be women with trained intelligence, earnest purpose, and active conscience, that they may serve to better effect not only their families, but the community in which they live. However, in planning this course of study the aim has been to keep in mind the fact that woman's privileges, woman's training, woman's rights are limited to-day and always will be by the rights of the prospective child and of the child who is now in our midst.

CHAPTER IX.

AGRICULTURAL EDUCATION.

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CONTENTS.

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3. Important legislation.—North Carolina, North Dakota, Texas, New York; proposed measures in various States and in Congress.
4. Status of instruction in elementary and secondary agriculture.
5. Some types of secondary agricultural schools.—Smith's Agricultural School, Northampton, Mass.; Second District Agricultural School, Tifton, Ga.; Farragut School, Concord, Tenn.; Winona College of Agriculture, Winona Lake, Ind.; Michigan agricultural high schools.
6. Preparation of teachers in secondary and elementary agriculture in State agricultural colleges and normal schools.

CONTINUED INTEREST IN AGRICULTURAL EDUCATION.

Agricultural education and agriculture as a means of education continue to be predominating topics of discussion at educational conferences and in professional journals. Special legislation relating to elementary or secondary instruction in agriculture was proposed or enacted in the general assemblies of 30 of the 40 States whose legislatures have met in session during the past year. State committees to investigate the needs of agricultural and industrial education are at work or have recently completed their work in 7 States—Illinois, Indiana, Maine, Massachusetts, Michigan, South Carolina, and Wisconsin.

An organization, the American Association for the Advancement of Agricultural Teaching, was formed in Chicago during the past year, largely of representatives of the departments of agricultural education of the State colleges of agriculture of the Middle West. This organization proposes to hold annual meetings and also throughout the year to collect and distribute to its members information concerning the developments in agricultural education in schools and colleges. The yearbook of the National Society for the Study of Education for 1911 is devoted entirely to a discussion of agriculture in

secondary schools, with chapters by W. R. Hart, of the Massachusetts Agricultural College; G. P. Warren, of the New York State College of Agriculture; F. R. Crane, principal of the Dunn County School of Agriculture, at Menominee, Wis.; W. H. French, Michigan Agricultural College; R. W. Stimson, agricultural agent of the Massachusetts State Board of Education; D. J. Crosby, of the United States Department of Agriculture; and A. C. Monahan, of the Bureau of Education. The special agricultural school, the agricultural department of the high school, the extension work of the agricultural high school, and the preparation of teachers of agriculture for secondary schools are all taken up.

WAKE COUNTY (N. C.) SCHOOL FARM MOVEMENT.

A unique plan for agricultural education has developed in Wake County, N. C., under the leadership of Z. V. Judd, the county superintendent of public instruction. The plan has been called the "School farm movement" and comprehends the establishment of small farms of from 2 to 10 acres in connection with every country school. This farm is to be cultivated by the children and their parents, working together on certain days in what Mr. Judd has termed "school farm working bees." The working bees are gatherings for social purposes, as well as for the cultivation of the school land. Each school farm is usually given to one crop. A regular system of rotation is planned. The agricultural work is done under the supervision of the best farmer in the community, so that good methods are used. Every person, therefore, taking part is given the opportunity to observe the most successful systems of raising the crops under cultivation. The income received from the sale of the products raised on the school farm is used for general school purposes. It is hoped by this movement to accomplish three things: First, to make money to be used in supplementing the school fund; second, to offer an opportunity to make the teaching of agriculture in the rural school entirely practical and to illustrate how pleasant farm work can be made under proper conditions; and, third, to offer rural communities opportunities for gatherings to develop the social side of farm life, with the schoolhouse the social center of the community and the principal occupation of the people—farming—the center of interest.

The first work was done at Holly Springs, where two years ago 2 acres of land were planted in cotton. The lighter work was done by the women and children of the community, while the men did the heavy work. A community dinner was a part of the program for each gathering. Two bales of cotton were raised, netting the school $119. The next year the plan was tried at 11 schools, the crops raised including cotton, corn, tobacco, and wheat. On the 11 farms 1,200 persons participated in the work. The net profit was

nearly $1,200. Last year 6 additional farms were established, making a total of 17 farms.

The children of the county want these school farms, and the older people are in sympathy with the idea. The results have been an increased interest in the schools and the school work, an improvement in the appearance of the buildings and grounds, and the lengthening of the school year; also the development of a better community spirit and an improvement in general farming in the county.

COMMISSIONS ON AGRICULTURAL AND INDUSTRIAL EDUCATION.

The prevailing interest in agricultural education is well shown by the creation of commissions in several States by legislative enactment to investigate the needs of agricultural and industrial education. The recommendations of several such commissions concerning instruction in agriculture are given in the following paragraphs. Considerable space is devoted to the report of the Massachusetts committee on account of the thoroughness of the survey relative to agricultural education that was made in large sections of the State, and to the plan proposed of connecting the instruction in the agricultural department of the school with the student's home work on the farm, under the supervision of the school instructor.

ILLINOIS.

An educational committee in Illinois, reporting to the legislature of 1911, devoted a large part of its report to the recommendations of a subcommittee on industrial education. The subcommittee recommended that the high-school curriculum should distinctly recognize the vocational needs of the student, allowing him to devote at least one-fourth of his time to work of that character. Six vocational courses should be offered, including "a course leading to the profession of farming, with special reference to the domesticated animals and plants, and to the soil as a sustainer of life, supported by the physical sciences and by the principles of accounting." Also:

> The nature-study work of the grades should lead up naturally to the high school, and to this end should be so conducted as to follow the evolution of the child and develop gradually from the undifferentiated study of the natural environment in the lower grades to a differentiation in the upper so clear as to establish in the mind of the pupil in the grammar grade a conception of the field of the various natural sciences and a well-developed vocational conciousness. * * * By this means the child is prepared for an intelligent choice of his vocational course. * * * Schools should be advised to ascertain whether and to what extent pupils are engaged in duties outside of school, and when it shall appear that such duties are definite and regular, then their value should be assessed and proper credit given the student on the progress of his course, particularly for work done in direct line with the vocational courses of the high school.

A course of study in agriculture for a well-equipped 4-year high school is suggested.

MASSACHUSETTS.

The special committee of the Massachusetts Board of Education, appointed to investigate the needs of agricultural education in Massachusetts, consisted of the State commissioner of education, Dr. David Snedden; Deputy Commissioner C. A. Prosser, and Special Agent R. W. Stimson. The findings, in brief, of the committee follow:

1. Farming in Massachusetts is a highly important vocation.

2. Massachusetts farming, where most profitably practiced, is peculiarly dependent upon and responsive to scientific knowledge and improved methods. Its increasing diversity and specialization, which are such promising elements in its progress, make more difficult the task of preparation for it, and make more emphatic the duty of the State to the boys and girls who are to follow it.

3. Agencies for carrying scientific knowledge and improved methods to adults and to students of such age and preliminary training as to enable them to meet the usual college entrance requirements appear to have been both carefully considered and fairly well established.

4. There is a decided lack of and a pronounced demand for agricultural training of a scientific and very practical character, suitable for boys, and perhaps for some girls, 14 years of age and older, who expect to gain their livelihood from and to spend their lives on Massachusetts farms.

5. The growing commercial and industrial school facilities open to boys and girls 14 years of age and older tend to lure away from the land and into the congested centers, in the absence of competent and attractive agricultural education, many young people whose natural aptitudes would make them, if properly trained, better and more prosperous citizens in the country.

6. Financial aid for agricultural education, suitable for adults and for college students, has for a half century been furnished by this Commonwealth and by the Federal Government. State aid for vocational training of secondary grade in agriculture is, moreover, entirely in keeping with State aid for independent industrial school work, and to some extent was provided for by chapter 505 of the acts of 1906 and chapter 572 of the acts of 1908.

7. The slow development of secondary agricultural schools, the testimony of farmers throughout the State, and the demand for the investigation here reported which was made by the legislature of 1910, are evidence of the need of additional legislation providing for this kind of agricultural education.

8. School committees have long been authorized and empowered to provide instruction in agriculture in the public elementary and high schools of the State. While this training has been more liberal and cultural than vocational in its aims and results, it merits the hearty support of local communities in this Commonwealth.

Instruction in gardening and in other matters relating to the farm should be encouraged and guided in all the elementary schools of the State where the home environment or the school facilities make productive work and personal observation by the pupils practicable.

As an important aid to liberal education in all of the high schools of the State, particularly in those which have a rural environment, guidance and encouragement should be given with a view to the incorporation of generous proportions of agricultural subject matter in science instruction, and to the sympathetic correlation of certain parts of the instruction in English, history, civics, and hygiene with rural life and labor, institutions, and progress.

9. In order that more adequate school facilities may be provided in this Commonwealth for preparing those above 14 years of age for productive and profitable farming, vocational agricultural departments are proposed in this report for establishment in existing high schools.

10. We recommend that State aid, equal to that granted any town or group of towns constituting a district, for industrial schools, be continued as at present provided for in the case of any town or group of towns constituting a district, for the establishment and maintenance of an independent agricultural school. (See chapter 505, acts of 1906, and chapter 572, acts of 1908.)

We recommend that provision be made for the establishment of agricultural departments in existing high schools, with State aid, and with rigid definition and enforcement of vocational standards.

The methods and vocational standards of instruction suggested for the development of such agricultural departments in existing high schools have nowhere been tried in the exact form proposed in this report. Departments somewhat of this type may be found in 14 schools in the Province of Ontario. The plan proposes for the department at least one teacher, a practical man with an agricultural college training, who shall devote his entire time to farming subjects. His services should be rendered through the growing and harvesting seasons, in part as instructor in agriculture at the school and in part as supervisor of school projects at the homes of the students. The department should have the exclusive use of a well-lighted classroom fitted in such a way as would permit indoor demonstrations of farm animals and machinery. The equipment should include garden tools and laboratory apparatus, a hotbed and cold frame, a small greenhouse, and an acre of land for garden, nursery, and demonstration plats. The materials, implements, and animals required for demonstration should be brought to the school by the students, or should be studied on thrifty farms not too far distant.

The department should offer training in the science and art of agriculture as an elective subject for high school pupils, and also open to pupils who intend to be farmers, even though they might not be able to pursue successfully certain other branches of study offered by the school. The dominant motive of the department should be agricultural and vocational.

As the most promising solution of the problem of securing effective vocational training in agriculture, the report recommends that the home farms of the pupils be utilized in what may be termed "part-time work" in agriculture. This means that the pupil would do at his home productive farm work closely correlated to the study work in the school, and under the supervision of the teacher of agriculture. The plan suggested calls the home work a "project." A "farming project" as the term is used in the report "is a thing to be done on the farm, which, in the preparation for doing it and in the carrying of it out to a successful result, would involve a thorough-going

educational process." Among farm projects suggested are: Keeping a pen of poultry, caring for a select part of an orchard, raising a specified crop of potatoes, caring for a cow, etc.

> The farmer and his farm must constitute the fundamental factor in the practical training of the boy. * * * In the use of the home time of the pupil the fullest value of the agricultural course will come from the fullest possible participation of the boy in the ordinary routine of farm work as usually carried out by the parent; but the greatest benefit of the school can not be had without the use of a part of the boy's time, during the hours spent at home, for strictly school purposes. * * * In directing the boy in the discharge of his projects, the school must of necessity, it is believed, undertake the supervision of a portion of his work at home. Supervision of part-time work in agriculture would not be an attempt on the part of the school to interfere with the private management of the farms of the parents. Supervision would, nevertheless, be a continuous effort by the school to assist, advise, and encourage the student in applying under home conditions farm methods which had proved successful elsewhere, and thus to cause the practical training of the student to result in vocational efficiency.

The plan provides that the division of time in carrying out the school and home-farm cooperative method of training, should be about as follows: For the execution of the projects, including work during vacations and other out-of-school hours, 50 per cent; for the related study, 30 per cent; for systematic courses in English, history, civics, mathematics, and other subjects of general culture and good citizenship, the remaining 20 per cent.

MICHIGAN.

The Michigan State Commission on Industrial and Agricultural Education, in a report to the governor of the State under date of December 1, 1910, recommend for the State of Michigan, first, the introduction of courses in agriculture, manual training, and home economics in all high schools; second, the certification of all teachers of agricultural and industrial subjects; third, State supervision of all agricultural and industrial courses in the public schools; fourth, limited State aid for such courses. The commission report in favor of agricultural courses in regular high schools, rather than the establishment of independent agricultural schools. The State, in 1907, authorized the establishment of county agricultural high schools; one only had been established previous to the present year, the Menominee County school. Four-year agricultural courses were given in 6 high schools in 1909–10, and in 10 in 1910–11. This work was introduced largely through the influence of the department of agricultural education of the State agricultural college, and the courses were carried out under the supervision of that department. The report of the commission is based largely upon the experience with these two sorts of schools.

WISCONSIN.

A similar committee in Wisconsin, known as the commission upon the plans for the extension of industrial and agricultural training, have reported (Jan. 10, 1911) in favor of increasing the amount of agriculture taught in the county training schools from one unit to two, a unit representing a full one-year course; special State aid to consolidated rural schools giving courses in agriculture; also to State graded schools, township high schools, and city high schools, provided that at least two units of agriculture be given and the courses be approved by the State superintendent of public instruction. Acting upon this recommendation, the legislature has provided for State aid of $250 for each department of agriculture established in connection with any free high school.

SOUTH CAROLINA.

A special commission in South Carolina, appointed to investigate and report upon the advisability of establishing and maintaining agricultural schools and branch experiment stations, recommend that, instead of establishing separate agricultural schools, the State create a commission on agricultural education to consist of one member of the board of trustees of Clemson College, the dean of the agricultural department of the college, the professor of secondary education of the University of South Carolina, and the professors of elementary agriculture and elementary education at Winthrop Normal and Industrial College. This commission would appoint a supervisor of agricultural education, who would be an officer of the State department of education and may be a professor in Clemson College. The commission would have general charge of the introduction of agricultural education into the schools of the State. The supervisor of agricultural education would prepare and distribute bulletins for the public-school teachers, visit schools and aid in the establishment of agricultural instruction, and act as a general adviser on all that pertains to agricultural education in the public schools. The commission recommend that Clemson College, Winthrop College, and the State University offer special courses designed to prepare teachers of agriculture for the elementary and secondary schools.

MAINE.

The Maine Legislature in 1909 authorized the State superintendent of public instruction to conduct an investigation of systems of industrial education in other States and countries. The State superintendent appointed to act for him six representative men of the State.

Their recommendations relative to agricultural education, manual training, and domestic science, are, first, the introduction of drawing, manual training, and domestic science into all grades of the elementary schools; second, greater emphasis on local geography and local industries; third, school and home gardens; fourth, special courses for training teachers in agriculture, manual training, and domestic science; fifth, encouragement by the State of courses in these subjects in public high schools and academies; sixth, evening continuation courses in industrial and manufacturing centers; seventh, permissive legislation for the establishment of separate trade schools. The commission expresses the belief "that upon the public school system of the rural sections of Maine depends the further development of her agricultural interests;" and it recommends for rural schools: Better-equipped and more permanently employed teachers whose minimum qualifications and minimum salary shall be fixed by the State; expert rural-school supervision; consolidation where possible and seemingly advisable; the introduction of instruction in elementary agriculture.

IMPORTANT LEGISLATION.

NORTH CAROLINA.

The Legislature of North Carolina, in an act approved March 3, 1911, made provision for "county farm-life schools," for the training and preparation of boys and girls for farm life and home making. The course of study, subject to the approval of the State superintendent of public instruction, shall include practical work on the farm by the boys and practical work in all subjects relating to housekeeping and home making by the girls. A high-school department shall be conducted in connection with these schools, offering the course of study prescribed under the public high-school law of the State for first-grade high schools. The farm-life school and the high-school department shall both be under the control and management of a board of trustees, consisting of one member from each township in the county. The schools may not be located in any city or town of more than 1,000 inhabitants nor within 2 miles of the corporate limits of any city or town of more than 5,000 inhabitants. For maintenance, the county or township or school district, or all combined, wherein the school is located shall provide annually at least $2,500; also they shall provide a school building, dormitory buildings with accommodation for at least 25 boys and 25 girls, a barn and dairy with necessary equipment, and a farm of not less than 25 acres, all subject to the approval of the State superintendent of public instruction. The State will pay annually to each approved school $2,500. No person shall be employed as principal of such a school who does not hold a high-school teacher's certificate on all re-

quired subjects except Latin, Greek, and modern languages, including an additional certificate from the State board of examiners and the president of the North Carolina College of Agriculture and Mechanic Arts, stating that he has furnished evidence satisfactory to them of his qualifications by special training and practical experience for said position. A similar certificate is required for teachers for the special training of girls for home making and housekeeping.

In addition to the regular courses these schools shall conduct agricultural farm-life extension and demonstration work and shall offer short courses in farm-life studies for adult men and women. All of the work of each school shall be under the general supervision of the county superintendent of public instruction, the school being in all respects an organic part of the county public-school system.

Craven County voted, during the past summer, to establish a school under the provisions of this act. In Guilford County, under a special provision of the legislature, the agricultural work began in September in three public high schools.

NORTH DAKOTA.

The Legislature of North Dakota, in the 1911 session, passed several acts of importance relative to agricultural education. "Lessons in nature study and elements of agriculture" has been added to the branches to be taught in all common schools, and agriculture may be offered as an optional subject for a teacher's certificate. A law to provide for the establishment and maintenance of a department of agriculture, manual training, and domestic science in State high, graded, and consolidated schools provides that any such school having the proper facilities may, upon application to the high-school board, be designated to maintain an agricultural department. Each such school shall employ trained instructors in agriculture, manual training, and domestic science and provide at least 10 acres of land suitable for a school garden. Said department "shall offer instruction in soils, crops, fertilizers, drainage, farm machinery, farm buildings, breeds of live stock, stock judging, animal diseases and remedies, production, testing and hauling of milk and cream, the manufacture of butter and cheese, the growth of fruit and berries, management of orchards, market garden and vegetable crops, cereal grains, fine seeds, bookkeeping and farm accounts, and all other matters pertaining to general practice." Each school shall receive annually $2,500 State aid. This bill will not become effective immediately, as the section appropriating money for such schools for 1911–12 was vetoed by the governor for the reason that the revenues of the State had been exceeded by other appropriations. All other portions of the bill were approved.

An act, approved March 6, 1911, provides for county agricultural and training schools, said schools to give instruction in agriculture, domestic economy, manual training, and for training of teachers for the rural schools. The schools are to be established by vote of the citizens of the county. Buildings and land must be presented by any city or village desiring the location of such school. It is the intent of the act to establish schools the yearly cost of maintenance of which will not exceed $6,000 each, the State to pay one-half and the county one-half.

Each school shall be controlled by a board of trustees, including four members appointed by the county commissioners, and the county superintendent of schools, who shall in all cases be secretary of the board. There is provided "a State agricultural and training school board, which shall consist of the president of the State agricultural college, the State superintendent of public instruction, and three practical farmers, who shall be appointed by the governor." This board shall prescribe the course of study to be pursued in the county agricultural and training schools, which shall include, first, instruction in the elements of agriculture, including the study of soil, horticulture, and plant life, animal life on the farm, a system of farm accounts, and manual training and domestic economy; second, instruction in the common branches and such other branches as are necessary for the training of teachers in the rural schools, in methods of school management and provisions for observation and practice in the art of teaching.

The State board of agricultural and training schools shall determine the qualifications to be required of the principal and other teachers in said school, and the president and secretary of said State board shall each have a vote in the election and in fixing the salaries of the principals of said schools. The other teachers shall be elected by the board of trustees of each school established under this act. It is provided that the course of study in the department of agriculture shall be so framed as to correlate with the courses of study in the State agricultural colleges so that students from the county schools shall be admitted without examination to the class in the State agricultural college next following that which they have completed in the county school. The superintendent of public instruction and the president of the Agricultural College shall visit and inspect each school at least once each year, and report to the governor, with reference to property, management, instruction, and efficiency of these schools, and make such recommendations as in their judgment will further the efficiency and usefulness of any or all such schools.

TEXAS.

An act of the Legislature of Texas, approved March 6, 1911, provides that "it shall be the duty of the State board of education to duplicate, by an appropriation out of money provided for by this act, an amount not less than $500, nor more than $1,500, that shall have been set apart by the trustees of a public high school of the first class or of the second class, * * * an amount of not less than $500, nor more than $1,000, that shall have been set apart by the trustees of a public high school of the third class in a common school district, for establishing, equipping, and maintaining a department of agriculture, * * *. Such appropriation shall not be made more than twice to the same school." The board of trustees of the high school applying for State aid for a department of agriculture must provide ample room and laboratory for its teaching, at least 3 acres of land, conveniently located, which shall be well adapted to the production of farm and garden plants, and shall employ a teacher who has received special training for giving efficient instruction in the subject. Schools must give evidence that after the State aid is withdrawn, the department of agriculture will be continued. No school shall receive State aid without the recommendation of the State superintendent of public instruction.

NEW YORK.

An act in New York State, approved July 26, 1911, provides for an advisory board to consider plans for the promotion and direction of agricultural education and the advancement of country life. This board is to consist of 12 members, including the director of the State agricultural college, the director of the State experiment station, the deans of the State schools of agriculture at Alfred University, St. Lawrence University, and Morrisville, a member of the State fair commission, and 3 other persons appointed by the governor. An act, approved July 28, 1911, provides for a new State school of agriculture to be located at Cobleskill, Schoharie County, to be known as the Schoharie State School of Agriculture. The school will give instruction in agriculture, mechanic arts, and home making, and will engage in agricultural extension teaching. It shall be controlled by a board of trustees, including the State commissioners of education and agriculture, and 5 others appointed by the governor. For establishing the school $50,000 is appropriated.

Enactments of other legislatures in the 1911 session are given in the section on the status of agricultural instruction in the various States. Several measures presented and discussed in various legislatures, but which have not yet been enacted, deserve mention.

PROPOSED MEASURES IN VARIOUS STATES.

In California a bill was introduced authorizing instruction in manual training, domestic science, agriculture, horticulture, dairying, and military training in all of the high schools of the State. In Connecticut one proposed measure provided that the State board of education should provide for agricultural courses in high schools applying for the same, the State to pay $1,000 and the town $500 toward the salary of the instructor, the State and town to share equally the expense of the plant and apparatus. Another would have required the State board of education to establish work in agriculture, carpentry, blacksmithing, and household arts in rural high schools, the State to pay two-thirds of the cost, not to exceed $2,000 to any one school; and a third proposed a State agent to supervise agricultural education, at a salary of $2,500. In Iowa it was proposed to require agriculture and home economics in all schools, and for teachers' certificates. A bill was introduced in the Nebraska Legislature providing for an assistant county superintendent for counties having more than 1,000 school population, said assistant to devote his entire time to the supervision of instruction in agriculture, manual training, and domestic science in rural schools. Many bills have been introduced into the Legislature of New York. Additional State schools of agriculture at Delphi and at Keuka College were considered; also a bill to provide for county teachers' training schools in agriculture. In Ohio, State aid was considered for departments of agriculture and domestic science in high schools to equal one-half the cost of the department. In South Dakota the advisability of establishing "high schools of agriculture, industrial arts, and home making," was considered. Measures were debated in Texas proposing to establish a "North Texas Agricultural College at McKenney", an agricultural school at Greenville, and also congressional district agricultural schools. A bill in Utah proposed to require instruction in agriculture in schools of all cities and farming communities. In Washington a measure was introduced to create a committee of five to be appointed by the governor and to be known as the Washington Industrial Education Commission to investigate the needs and methods of agriculture and industrial education, and to report in 1913.

In Congress several bills were introduced proposing aid for education in agriculture, but on account of matters of greater interest received little attention. On March 3, 1911, Senator Carroll S. Page, of Vermont, introduced a bill (S. 10905) "To cooperate with the States in encouraging instruction in agriculture, the trades and industries, and home economics in secondary schools; in preparing teachers for those vocational subjects in State normal schools; and to appropriate money therefor and to regulate its expenditure." The

bill follows very closely the Davis and Dolliver bills of the previous years, but it attempts to better the portions of those bills which were most severely criticised. Some of the features peculiar to the Page bill are the following:

States and Territories accepting the provisions of this act shall receive for the respective lines of education and research only such portions of the full amount to which each State and Territory would be entitled of the respective funds to be used for the purpose of this act as in the judgment of the Secretary of the Interior it has made ample preparation to utilize to advantage, and such funds as would otherwise be allotted to the respective States, but as are not by him authorized to be used, shall remain in the Treasury.

That the funds appropriated in this act for instruction in agricultural secondary schools in the respective districts provided for in this act shall be used only for distinctive studies in agriculture and home economics; the funds appropriated for instruction in public secondary schools shall be used only for distinctive instruction in the trades and industries, home economics, and agriculture, in separate schools organized for that purpose, or in separate units or courses organized as departments under a properly qualified head in regular secondary schools; the funds appropriated for instruction in State and Territorial normal schools shall be used only for distinctive studies in agriculture, home economics, and the trades and industries in separate units and courses organized as departments under a properly qualified head; * * * That all States, Territories, and the District of Columbia accepting these funds shall provide other funds with which to pay the cost of providing the necessary lands and buildings, and to pay the cost of all instruction in such other and general studies as shall complete well-rounded courses, the main purposes of which are to give vocational as well as general preparation in agriculture, the trades and industries, and home making, suited to the needs of the respective sections and communities of the United States.

An identical bill (S. 3) was introduced into the Sixty-second Congress, first session, by Senator Page, on April 6, 1911. Representative C. R. Davis, of Minnesota, on April 20, 1911, introduced a bill (H. R. 6333) which differs in no respect from his bill of February 8, 1910 (H. R. 20374), reviewed in this report for 1910. Another bill (H. R. 2907) very similar to the Davis bill was introduced by Representative William B. Wilson, of Pennsylvania, on April 10, 1911, and a revision of the bill, including provisions for extension work in the agricultural colleges, was introduced on June 29, 1911 (H. R. 12156).

On April 24, 1911, Senator L. S. Overman, of North Carolina, introduced a bill (S. 1563) "To apply a part of the proceeds from the sale of public lands to the support and maintenance of farm-life schools of 4, and in the rural high schools of 3. It is required for of farming." This measure proposes that there shall be paid to each State and Territory for the purpose indicated in the title the sum of $25,000 for the year ending June 30, 1911, and an annual increase of the amount of such—

appropriation thereafter for ten years by an additional sum of one thousand dollars over the preceding year, and the annual amount to be paid thereafter to

each State and Territory shall be thirty-five thousand dollars, to be applied only to instruction in agriculture, the English language, and various branches of mathematical, physical, natural, and economic science, with special reference to their applications in farm life, and to the facilities of such instruction, such as "to prepare boys for agricultural pursuits and farm life and girls for home making and housekeeping on the farm, including practical work on the farm by the boys and practical work in all subjects relating to housekeeping and home making by the girls": *Provided*, That no State or Territory shall receive any of the benefits of this act unless such State or Territory shall appropriate a sum at least equal to the amount herein appropriated for a similar purpose.

STATUS OF INSTRUCTION IN ELEMENTARY AND SECONDARY AGRICULTURE.

The following statements of the status of instruction in agriculture in elementary and secondary public schools show that agriculture is a required subject in all common schools of 12 States, in the rural schools of 5, and in the rural high schools of 3. It is required for teachers' certificates in 16 and is optional in 3. Special agricultural schools receiving State aid are established in 16 States and are authorized in North Dakota. State aid to departments of agriculture in high schools is given in 12 States. Secondary schools of agriculture or secondary courses in agriculture, in addition to the collegiate courses, are maintained by the State agricultural colleges of 31 States. Summer schools giving elementary agriculture for teachers are conducted by 34 of these institutions, and short courses for farmers, extending from 2 to 12 weeks, are maintained by the majority of them. In the following paragraphs, where the statement is made that the State college maintains a secondary school of agriculture, it means that such school or course is maintained in addition to the regular collegiate work. The States requiring agriculture in the public schools and for teachers' certificates are given in the following lists, also the States aiding secondary instruction in agriculture in special schools or in high schools, or indirectly through the State colleges of agriculture.

States requiring instruction in agriculture in the common schools: Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, Tennessee, West Virginia, Wisconsin.

States requiring instruction in agriculture in rural schools: Missouri, North Dakota, Ohio, Texas.

States requiring instruction in agriculture in rural high schools only: Idaho, Pennsylvania, Utah.

States giving aid to special agricultural schools: Alabama, Arkansas, California, Colorado, Georgia, Massachusetts, Michigan, Minnesota, Nebraska, New York, North Carolina, Oklahoma, Pennsylvania, Vermont, Virginia, Wisconsin.

States giving aid to departments of agriculture in high schools: Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Mississippi, New York, North Dakota, Texas, Wisconsin.

States in which secondary schools or secondary courses in agriculture are maintained by the State agricultural colleges in addition to the collegiate

courses: California, Colorado, Connecticut, Florida, Georgia, Idaho, Kansas, Kentucky, Louisiana, Maine, Maryland, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia, Wisconsin.

Alabama.—Agriculture is required by law to be taught in all schools with the use of a textbook; required for teachers' certificates. There are nine State agricultural high schools, one in each congressional district, located as follows: Jackson, Evergreen, Abbeville, Sylacauga, Wetumpka, Hamilton, Albertville, Athens, and Blountsville. Each school has received $4,500 annually from the State. This amount was increased by act of the legislature in 1911 to $7,500. Agriculture is taught in the State normal schools at Daphne, Jacksonville, Troy, and Normal (colored), and at the Girls' Industrial School, at Montevallo. By act of the legislature of 1911 a new school will be established at Lineville. This school is to be on a basis somewhat different from that of any other school in the State in that agriculture and household and domestic science are to be taught in all grades, making the school strictly industrial; annual appropriation, $3,000.

Arkansas.—Agriculture is required by law to be regularly taught in all schools with the use of a textbook; required for teachers' certificates. There are four State agricultural schools, established by act of the legislature in 1909 and located as follows: First, at Jonesboro; second, Russellville; third, Magnolia; and the fourth at Monticello. Agriculture is taught in the State normal schools at Conway and Pine Bluff (colored).

California.—Agriculture is a required subject; may be taught orally in connection with nature study; not required for teachers' certificates. The State established and supports the California Polytechnic School, at San Luis Obispo, a secondary school of agriculture and mechanic arts. The high schools at Bakersfield, Brawley, Escondido, Ferndale, Fresno, Gardena, Hollywood, Imperial, Livermore, Lordsburg, Oxnard, and Stockton have agricultural departments in charge of men employed primarily to teach agriculture. They have land for demonstration purposes, tools, and laboratory equipment. At least 10 other public high schools have introduced courses in agriculture. Agriculture is taught in the State normal schools at Los Angeles, Chico, San Diego, and San Jose. The University of California conducts the University Farm School, a secondary agricultural school giving a three-year course.

Colorado.—By act of the legislature approved January 25, 1911, a school of agriculture and mechanics arts will be established at the Fort Lewis School, formerly a United States Indian school. The lands and buildings were granted to the State for educational pur-

poses by act of Congress approved April 4, 1910. Control of the school is vested in the State board of agriculture. Indian pupils are admitted free of charge for tuition on terms of equality with white pupils. The State has appropriated $75,000 for the biennium, not less than half of which must be expended for equipment. Agriculture is taught in the State normal college at Greeley. The Colorado Agricultural College conducts a secondary school of agriculture, giving a three years' course of six months each year.

Connecticut.—Agriculture is taught in the State normal schools at Danbury, New Britain, and New Haven. The State agricultural college maintains a secondary school of agriculture with a two-year course.

Florida.—Agriculture is required by law to be thoroughly taught as a regular subject in all schools; required for teachers' certificates. The University of Florida maintains a secondary school of agriculture with a two-year and a one-year course.

Georgia.—Agriculture is required by law to be thoroughly and regularly taught in all schools; required for teachers' certificates. There are 11 State industrial and agricultural schools, 1 in each congressional district, located as follows: Statesboro, Tifton, Americus, Carrollton, Monroe, Barnesville, Powder Springs, Madison, Clarksville, Granite Hill, and Douglas. Each school now receives from the State an annual appropriation of $10,000. Agriculture is taught in the State normal school at Athens and the State normal and industrial college at Milledgeville. The State College of Agriculture maintains a secondary school of agriculture, giving a one-year course.

Idaho.—The new school code adopted by the legislature in the 1911 session requires that elementary agriculture and domestic science be taught in all rural high schools. It is taught in the State normal schools at Albion and Lewiston. The University of Idaho maintains a secondary school of practical agriculture, established in the fall of 1910 and offering a three-year course.

Illinois.—A textbook of agriculture has been adopted for the State teachers' reading circle and is used by rural teachers throughout the State. Agriculture is taught in many rural public high schools. It is taught in the State normal schools at Charleston, De Kalb, Macomb, and Normal. An educational commission, constituted by act of the legislature in 1907, recommended to the legislature in 1911 that the typical high school should maintain six vocation courses, including "a course leading to the profession of farming." (See review of report on p. 333.)

Indiana.—The legislature of 1911 provided for the establishment of a commission to investigate the needs and methods of industrial

and agricultural education. Agriculture is now taught in many public high schools and also in the State normal school at Terre Haute.

Iowa.—The legislature in 1911 authorized the State superintendent of public instruction to establish courses for training teachers for rural schools, including agriculture and domestic science, in the eleventh and twelfth grades in certain accredited high schools. State aid to each school for this training work is $500 annually. Agriculture is taught in many rural elementary and high schools.

Kansas.—By an act of the legislature teachers in the grades and rural schools are required to take an examination in the elements of agriculture. This law became effective June 1, 1911. Teachers' training courses are given in certain high schools selected by the State superintendent of public instruction. These schools receive $500 annually from the State. An act of 1911 provides that they may receive $250 additional if courses in agriculture and in domestic science are given, such courses to be approved by the State department of education. Agriculture is taught in at least 32 high schools, and in the State normal schools at Emporia, Hays, and Pittsburg. The Kansas Agricultural College maintains a two-year secondary school of agriculture.

Kentucky.—Agriculture is authorized in county high schools; is taught in the State normal schools at Richmond, Bowling Green, and Frankfort (colored). The State university maintains a secondary school of agriculture with a two-year course.

Louisiana.—Instruction in the principles of agriculture and in home economics and farm economy is required in all public elementary and secondary schools; required for teachers' certificates. Provision is made for an annual State appropriation of $25,000, to be divided among the high schools maintaining departments of agriculture approved by the State department of education. Such schools must have 5 acres of land for demonstration purposes, at least $400 worth of agricultural apparatus, tools, and farm implements, and a teacher who is a graduate of an agricultural college and who shall devote his entire time to the agricultural work. Seventeen agricultural high schools have established such departments and are receiving State aid. Agriculture is taught in the State normal school at Natchitoches. A secondary school of agriculture giving a three-year course is maintained by the State university.

Maine.—Natural sciences in their relation to agriculture are required in all free high schools. The forest commissioner is required by law to encourage instruction in elementary forestry in schools, academies, and colleges. Secondary schools teaching agriculture, manual training, or domestic science may receive from the State

$250 annually for each of these subjects taught. Five academies taught agriculture last year. The State normal schools are required by an act of the legislature of 1911 to introduce "such courses in manual training, domestic science, and agriculture as will enable graduates to teach elementary courses in these subjects." It is now taught in the State normal schools at Castine, Farmington, Fort Kent, Gorham, and Presque Isle. The State university maintains a secondary school of agriculture offering a two-year course.

Maryland.—Agricultural instruction may be required by the State board of education; authorized in county high schools; is in State course of study. To receive State aid, high schools must teach two of the three subjects, agriculture, manual training, and domestic science. There are two county agricultural high schools—the Calvert Agricultural High School and the Philopolis Agricultural High School—each receiving $1,400 annually from the State. The Maryland Agricultural College maintains a secondary agricultural school offering two years' instruction. All students of the State normal school at Bowie (colored) are required to take courses in agriculture.

Massachusetts.—Cities and towns may establish independent agricultural schools, which may receive State aid equal to one-half the cost of maintenance. Smith's Agricultural School at Northampton is the only one in operation. The Montague Agricultural School, after receiving State aid for three years, has been closed. By act of the legislature in 1911 State aid equal to two-thirds of the salary of a special instructor devoting his entire time to agriculture is given to high schools establishing departments of agriculture of the type recommended by the State board of education in its report on agriculture and industrial education, described on page 334. The Petersham Agricultural High School gives a four-year course in agriculture, and now receives State aid under this act. The State board of education has appointed an agent to supervise agricultural departments so established. Agriculture is taught in at least 18 high schools and in the State normal schools at Bridgewater, Hyannis, and North Adams. A commission appointed by the State board of education to investigate the needs of agricultural education in the State has made an exhaustive study and submitted a valuable report, in which they recommend State aid for agricultural departments in existing high schools.

Michigan.—Instruction in agriculture is specifically authorized in rural high schools. County agricultural high schools were authorized in 1907; State aid provided. One was established in 1907 at Menominee (the Menominee County Agricultural School) and receives about $4,000 annually from the State. Another has been estab-

lished in 1911 at Sault Ste. Marie. Four-year courses in agriculture are given by 10 high schools without State aid. Agriculture is taught at the State normal schools at Kalamazoo, Marquette, and Mount Pleasant, and in many of the county normal training schools. A special commission appointed to investigate the needs of industrial and agricultural education has reported to the governor recommending the introduction of agriculture, manual training, and home economics in all high schools of the State, with State aid, and the certification of teachers of agricultural and industrial subjects. By an act of 1909 the State board of agriculture, on recommendation of the president of the State agricultural college, is authorized to grant agricultural teachers' certificates to persons who have completed the regular four years' course in agriculture, together with a course in pedagogics covering at least a half year's special instruction in that subject.

Minnesota.—Fifty consolidated rural schools were authorized in 1905, each to have 10 acres of land for instruction in farming; special State aid to not more than one such school in each county. County agricultural high schools were authorized in 1905. For properly equipped high schools maintaining agricultural departments approved by the State department of education the State will contribute two-thirds the cost of maintenance, not exceeding $2,500 annually. Ten such schools are now established, located at Albert Lea, Alexandria, Canby, Cokato, Glencoe, Hinckley, Lewiston, McIntosh, Red Wing, and Wells. A recent act of the legislature permits the establishment of 20 more such schools. These schools are to be located at Kasson, Warren, Sleepy Eye, Westbrook, Worthington, St. James, Northfield, Litchfield, Little Falls, Willmar, Madison, Hector, Wheaton, Cloquet, Deer River, Milaca, Bemidji, Fergus Falls, Thief River Falls, and Spring Valley. A law effective August 1, 1911, provides $1,000 to each of such high and graded schools as shall maintain a course prescribed by the high school board in agriculture, and either in home economics or in manual training. This shall not apply to any school receiving aid for industrial courses under any other act. Agriculture is taught in the State normal schools at Duluth, Moorhead, St. Cloud, and Winona. Three secondary schools of agriculture giving three-year courses are maintained by the State university. They are located at Crookston, Morris, and at the university farm at St. Paul.

Mississippi.—Agricultural instruction is required by law in all schools; required for teachers' certificates. County agricultural high schools authorized at the 1910 session of the legislature, two to be established in each county, one for white students exclusively and one for colored students. Twenty such schools are now established,

located at Kossuth, Cleveland, Derma, Buena Vista, Lucedale, Goodman, Bay Springs, Union Church, Ellisville, Purvis, Lena, Camden, Kilmichael, Mashulaville, Courtland, Poplarville, Mendenhall, Moorhead, Iuka, and Waynesboro. These schools receive annual State aid (maximum $1,500). The State agricultural college maintains a secondary school of agriculture, offering a course of one year.

Missouri.—Agriculture is a required subject in State course of study; required for teachers' certificates. It is taught in many high schools. It is taught in the State normal schools at Cape Girardeau, Kirksville, Maryville, Springfield, Warrensburg, and Jefferson City (colored). The Fourth District Normal, at Springfield, is conducting an agricultural high school with a two-year course.

Montana.—The Montana Agricultural College maintains a secondary school of agriculture, giving a three-year course of six months each year.

Nebraska.—Agriculture is required for teachers' certificates; county high schools are authorized to include agricultural and teachers' training courses. One such school has been established at Kimball. Four hundred township high schools offer courses in agriculture. The deputy State superintendent of public instruction devotes his entire time to agricultural and industrial education. Agriculture is taught in the State normal schools at Chadron, Kearney, and Peru. The University of Nebraska maintains a secondary school of agriculture, giving a three-year course. By act of the legislature approved March 21, 1911, a new school, to be known as the Nebraska School of Agriculture, is to be established at Curtiss, in the southwestern part of the State. It is to be under the control of the board of regents of the university. For land, buildings, and equipment $100,000 was provided.

Nevada.—School districts are authorized to borrow money by issuing bonds for the purpose of purchasing grounds, erecting buildings, furnishing equipment, and maintaining schools for industrial training, domestic science, and agriculture. No schools have been established.

New Hampshire.—Agriculture is taught in several academies and high schools; a four-year course of study is presented in the State school report. The State agricultural college conducts a two-year secondary school of agriculture.

New Jersey.—Under the law passed in the 1911 session of the legislature, one of the deputy commissioners of education will act as "inspector of industrial education, including agriculture."

New Mexico.—The State college of agriculture maintains an industrial school of agriculture with a four-year course.

New York.—Any city or any union free school district may establish an independent high school of agriculture, mechanic arts, and home-making. State aid, $500 for one teacher and $200 for each additional teacher devoting his entire time to such school. Agricultural courses are outlined in the State course of study. The State department of education employs a supervisor of agricultural education. To be eligible to the office of district superintendent, candidates must pass an examination on the supervision and teaching of courses in agriculture. There are three State schools of agriculture of secondary grade, namely, the State school of agriculture at St. Lawrence University, Canton; the State school of agriculture at Alfred University, Alfred; and the State school of agriculture at Morrisville. Agriculture is taught at the State normal schools at Cortland, New Paltz, and Oswego. By act of the legislature approved July 28, 1911, a fourth State school of agriculture is to be established at Cobleskill, Schoharie County.

North Carolina.—Agriculture is a required subject for all schools; required for teachers' certificates. An act of the legislature approved March 3, 1911, provides for the establishment of county farm-life schools, such schools to maintain a high-school course including complete courses in agriculture and home making. State aid, $2,500 annually to each school. Not more than 10 may be established in any one year. Agriculture is taught in the State normal school at Greenville, and the four State normal schools for colored students, at Elizabeth City, Fayetteville, Franklinton, and Winston-Salem. The State agricultural college gives a one-year secondary course in agriculture.

North Dakota.—Instruction in agriculture is required in all common schools; an optional subject for teachers' certificates. The legislature in 1911 provided for State aid to rural schools, which, together with other requirements, "must offer a course in agriculture"; also for departments of agriculture, manual training, and domestic science in State high, graded, and consolidated schools. Any school having proper equipment and suitably located may be designated by the State high-school board to maintain an agricultural department; State aid, $2,500 annually to each such school. Further provision was made for county agricultural and training schools. Agriculture is taught in the State normal schools at Maryville and Valley City. The agricultural college maintains an agricultural and industrial high school giving a four-year course. The State supports the North Dakota School of Forestry, a school of secondary grade established in 1907 to teach forestry and agriculture.

Ohio.—Agriculture is a required subject in all common schools except those in the city school districts. By act of the legislature in 1911 the State is divided into four districts, and the State commissioner of common schools has appointed a superintendent of agricultural education for each district. Agriculture is taught in over 200 high schools and in the State normal schools at Oxford and Miami. The State university maintains a two-year secondary course in agriculture. Agriculture will be required after September 1, 1912, for teachers' certificates for common schools, and will be an elective subject for high-school teachers' certificates.

Oklahoma.—Agriculture is required to be taught thoroughly in all public schools; required for teachers' certificates. Six State schools of agriculture have been established, located as follows: The Murray State School of Agriculture at Tishomingo, Johnston County; the Haskell State School of Agriculture at Broken Arrow, Tulsa County; the Panhandle Agricultural Institute at Goodwell, Texas County; the Fifth District State School of Agriculture at Helena, Alfalfa County; the Connors State School of Agriculture at Warner, Muskogee County; and the Cameron State School of Agriculture at Lawton, Comanche County. It is taught in the State normal schools at Alva, Durant, Edmond, Langston (colored), and Weatherford. The State agricultural college supports a "professor of agriculture for schools," whose duties are "to direct and advise in all matters relating to the teaching of agriculture and the allied subjects in the common schools." The college maintains a school of practical agriculture with a two-year course.

Oregon.—The State agricultural college maintains a secondary school of agriculture with a course of two years.

Pennsylvania.—The school code approved May 18, 1911, provides that agriculture shall be taught in township high schools; also that a portion of the income of the State school fund may be used "to promote education in conservation, forestry, and agricultural and industrial pursuits." Agriculture is taught in the State normal schools at East Stroudsburg, Indiana, and Millersville. The State supports the Pennsylvania State Forestry School at Mont Alto, and aids the National Farm School at Doylestown. The State agricultural college maintains a two-year secondary course in agriculture.

Rhode Island.—Agriculture is taught at the State normal school, at Providence. The State college conducts a two-year secondary course in agriculture.

South Carolina.—Agriculture may be required in all schools by county boards of education and for teachers' certificates. It is taught at the Winthrop Normal and Industrial College, at Rock Hill, and the Colored Normal, at Orangeburg. Clemson College conducts a

two-year secondary course in agriculture. A special committee has just completed an investigation of the advisability of establishing agricultural schools. (See review of their report, p. 337.)

South Dakota.—Agriculture is taught in the State normal schools, at Aberdeen, Madison, and Springfield. The State college of agriculture maintains a secondary school of agriculture, giving a three-year course.

Tennessee.—Agriculture must be thoroughly taught in all schools; required for teachers' certificates. The act of 1909, establishing three State normal schools for white students and one for colored students, requires that all of these institutions teach agriculture. The schools have been located at Johnson City, Memphis, Murfreesboro, and Nashville (colored).

Texas.—Agriculture is required in all rural schools; at option of local boards in towns and cities; required for teachers' certificates. Agricultural departments authorized in high schools. Schools appropriating from $500 to $1,500 for departments of agriculture receive an equal amount from the State. The State aid is for two years only and schools must give satisfactory evidence that the agricultural course will be continued after the State aid is withdrawn. Agriculture is required by law to be taught by all State normal schools. It is taught by the State normal schools at Canyon, San Marcos, Huntsville, Denton, and Prairie View (colored). The State agricultural college conducts a two-year secondary course in agriculture.

Utah.—Agriculture is required by the State board of education to be taught in every accredited high school participating in the maintenance fund provided by the State for high schools. An act of the legislature, approved May 18, 1911, provides for the establishment of an experiment station at the Panguitch School, in Garfield County, formerly an Indian school, and that in connection with said experiment station there shall be taught branches of learning relating to the practical work in agriculture. Indian pupils shall be received, without payment of tuition fees, on terms of equality with white pupils. The State agricultural college maintains a high school giving optional courses in agriculture.

Vermont.—By act of the general assembly, approved November 29, 1910, the State normal school, at Randolph Center, was converted into an agricultural high school, the act taking effect July 1, 1911. Appropriations for real estate and equipment, $20,000; for maintenance, $10,000 annually. The board of trustees is composed of the governor, commissioner of agriculture, and three practical agriculturists appointed by the governor. Graduates shall receive

certificates to teach. Agriculture is taught in the State normal schools at Johnson and Castleton. Ten high schools are teaching agriculture.

Virginia.—Instruction in agriculture is optional with local school boards; an alternative subject in examinations for teachers' certificates. Agricultural high schools are authorized in each congressional district. Ten are in operation, located as follows: Appomattox, Burkeville, Chester, Driver, Elk Creek, Manassas, Middletown, Hampton, Lebanon, and Bedford Springs. Each school receives $3,000 annually. Agriculture is taught in the State normal schools at Farmville, Harrisonburg, Hampton (colored), and Petersburg (colored). The State agricultural college gives a one-year secondary course in agriculture.

Washington.—The Teachers' Manual for the elementary schools contains an eighth-grade course in agriculture, horticulture, and forestry. It is taught in the schools of 13 townships and in the State normal schools, at Bellingham, Cheney, and Ellensburg.

West Virginia.—Agriculture is required in free schools; required for teachers' certificates. It is taught in the State normal schools, at Huntington, Glenville, Institute (colored), Shepherdstown, and West Liberty. The State university maintains a secondary school of agriculture, with a three-year course.

Wisconsin—Agriculture is required in all schools; required for teachers' certificates. There are five county agricultural high schools, namely, Marinette County School of Agriculture and Domestic Science, Marinette; Dunn County School of Agriculture and Domestic Science, Menomonie; La Crosse County School of Agriculture, Onalaska; Marathon County School of Agriculture, Wausau; Winnebago County School of Agriculture, Winneconne. These schools receive $4,000 State aid annually. An act of the legislature of 1911 provides for State aid of $250 for each department of manual training, domestic science, or agriculture established in connection with any free high school. If the same department extend to three grades below the high school, this sum is increased to $350. Agriculture is taught in each of the 24 county training schools for teachers and in the State normal schools at La Crosse, Milwaukee, Oshkosh, River Falls, Stevens Point, Superior, and Whitewater. Milwaukee County will establish an agricultural school. Land has been obtained near Milwaukee city and plans for building are completed. The State university gives a two-year secondary course in agriculture.

SOME TYPES OF SECONDARY AGRICULTURAL SCHOOLS.

The following description of several agricultural schools is given to show the various types of schools being established, with some

facts regarding their organization, equipment, and course of study. Special schools of agriculture and public high schools with agricultural departments are both included.

Smith's Agricultural School and Northampton School of Industries, located at Northampton, Mass., is an independent agricultural and industrial school, opened in 1908, supported in part by the State and in part by the income of funds bequeathed to Northampton by Oliver Smith. This fund now amounts to about $310,660 and yields annually approximately $12,000. The total annual maintenance budget of the school is about $20,000. The institution is controlled by a local board of trustees elected by the voters of the city of Northampton. It has a main building costing $60,000, and farm buildings, equipment, and land valued at $25,000. The farm contains 100 acres.

A striking feature of the school plant is the main building, which consists in fact of four separate buildings arranged in such a way as to inclose completely a rectangle one-quarter of an acre in extent and about twice as long as wide. At the front, on one of the long sides of the rectangle, stands the office building, containing several recitation rooms; at the ends are the science building and the trades building, respectively; and in the rear is an auditorium with raised seats facing the inclosure. The inclosed rectangle is covered with a trestle roof, the four buildings with their connecting walls forming the sides of this inclosed and covered arena, which is well lighted from above. The partition between the arena and the auditorium is movable, and when pushed aside allows persons seated in the auditorium a view of the entire floor space, nearly one-fourth of an acre in extent. The buildings are of brick and limestone. The floor of the arena is cement.

Students 14 years of age or over are admitted to the school without further entrance requirements. They are allowed to remain only so long as they continue to show themselves able to do the required work. Three four-year courses of study are given, each strictly vocational in its purpose, designed respectively to prepare for farming, for mechanical work, and for housekeeping and home making. The course in agriculture is as follows, the first figures given being the number of recitation periods of 40 minutes each per year, the figures following in parentheses indicating the additional number of periods given to laboratory or practical work.

Course in agriculture in Smith's Agricultural School, Northampton, Mass.

Subjects.	Number of recitation periods of 40 minutes each per year.[1]			
	First year.	Second year.	Third year.	Fourth year.
Accounts and estimates			46	46
Algebra		68		
Arithmetic	128			
Agricultural laboratory		(18)	(54)	(54)
Bacteriology				10 (30)
Bees		2 (2)		
Bookkeeping	(64)		(63)	(21)
Botany		51 (47)		
Breeds and breeding			30 (10)	85 (10)
Chemistry		90 (54)	90 (54)	90 (54)
Dairy farming			59 (9)	59 (9)
Commercial law			4	4
Civics			8	8
Mechanical drawing		(200)	(18)	(18)
Freehand drawing	(53)			
Elementary science	66 (26)			
English	127	127	107	142
Floriculture	3 (60)			
Market gardening	15 (36)	15 (18)	15	15
Geometry		18	129	
History, American and local	22		10	10
Insects			42 (18)	
Physical geography	22		58	
Physical training	(24)	(24)	(24)	(24)
Physics		22		
Agricultural physics			22 (33)	22 (33)
Physiology			57	57
Poultry		18 (36)	27	27
Veterinary science				107 (18)
Ornithology			(9)	
Woodworking		(24)		

[1] Figures in parentheses indicate periods given to laboratory or practical work.

A fair representative of the congressional district agricultural school is the Second District Agricultural School, located at Tifton, Ga. This school is one of the 11 institutions established by act of the State legislature of 1906. It opened for instruction in 1908, and receives annually about $10,000 from the State. Tuition is free to citizens of the district. It is equipped with a main building for recitation and laboratory purposes, a boys' dormitory with accommodations for 100 boys, a girls' building with dormitory rooms for 80 girls, and appointments for instruction in domestic science, a dining hall, a barn, and a shop. The main building and the dormitories are of brick, and cost together $48,500; the other buildings are of wood. The farm contains 315 acres of land, and is well stocked and equipped.

There were 90 boys and 47 girls enrolled during the past year. The faculty consists of 3 men and 2 women, all well trained. The principal and assistant principal have had special training in agriculture. The course of study is as follows, the figures indicating the number of hours per week:

Course of study in the Second District Agricultural School, Tifton, Ga.

Subjects.	Hours per week.			
	First year.	Second year.	Third year.	Fourth year.
English	5	5	4	4
United States history and civics	4	4		
General history			3	
English history				3
Arithmetic	5	5		
Algebra			5	
Geometry				4
Geography	3	3		
Botany			3	
Zoology				3
Physiology		2		
Bacteriology		1		
Physics			5	
Chemistry				4
Agriculture	5	4		6
Horticulture			4	

The course in agriculture includes, in the first year, a study of the general subject with the use of Duggar's Agriculture for Southern Schools as a text, and a study of plant life as outlined in Atkinson's text. The second year is devoted to soils, including methods of cultivation, soil moisture, drainage, soil fertility, manures and fertilizers, and rotation of crops. Burkett's textbook on soils is the basis of the year's work. In addition one period a week is given to bacteriology, treating the subject as especially related to agriculture and to public health. The third year is given to horticulture and vegetable gardening and to agricultural botany. Bailey's text in botany is used in the latter course. In the last year field crops are studied, such as cotton, corn, oats, and sweet potatoes; also animal husbandry, including feeding, breeds and breeding, dairying, beef and pork production, and sheep, poultry, horse, and mule raising. Economic zoology is given in this year also, dealing especially with the farm friends and enemies. Little has been done in farm mechanics on account of the lack of facilities. A course has just been added including instruction and practice in the care of farm tools and machinery, elementary carpentry, concrete work, plumbing, blacksmithing, and mechanical drawing. Each class will devote two hours a week to this course.

The Farragut School at Concord, Tenn., is a good type of a country high school with courses, including agriculture, designed to prepare boys and girls for life and citizenship in the country. The building is located a mile and a half from the village. It is of brick, 2 stories high, and contains 8 recitation rooms, a small library, and a study hall which, when the desks are removed, will seat 300 people. The domestic-science room is in the basement and is furnished with individual outfits for a class of 12. The manual-training room is also in the basement and is fitted with 12 carpenter benches

and the necessary tools. The rest of the basement is occupied by toilet rooms with sanitary closets and shower baths. Three rooms of the first floor are used for elementary grades. The fourth room is a laboratory for biology, physics, chemistry, and agriculture. The school owns 12 acres of land, 6 of which are used for demonstration work connected with the instruction in agriculture; also a mare, two colts, and a flock of hens.

Three courses of study are offered: A Latin course, an English-science course, and an agricultural course, including manual training and home economics. Ninety per cent of the total high-school enrollment, which was about 100 in 1910–11, are taking the agricultural course. The work is arranged as follows, the figures being the number of recitation and laboratory periods a week:

Course of study in the Farragut School, Concord, Tenn.

Subjects.	Recitation and laboratory periods per week.			
	First year.	Second year.	Third year.	Fourth year.
English	5	5	5	5
United States history or German				5
General history or German			5	
Arithmetic	2½			
Algebra	2½	5		
Geometry			5	
Solid geometry				2½
Trigonometry and surveying				2½
Physical geography		2½		
Physiology		2½		
Botany	2½			
Zoology	2½			
Physics			2½	
Chemistry				2½
Agricultural chemistry				2½
Agriculture and manual training or domestic science	5	5	2½	

The instruction in agriculture deals largely with problems connected with the growth and improvement of plants, including soils and soil fertility, methods of cultivation, horticulture, and floriculture, with a less amount of work in animal husbandry, including poultry. For the work in animal husbandry the school makes use of the stock on the neighboring farms. Girls take the entire course in agriculture in preparation for home-making and for teaching in the rural schools.

A prominent feature of the work of the school is its community work in Knox County. For three years a "moonlight social" has been held monthly at the school, attended by farmers and their families. A program is given containing music and a discussion of some subject of general interest pertaining to farm life. For these meetings outside speakers are sometimes obtained. No phase of farm and home life is omitted. Once a year an all-day meeting is held, with

lectures on farming and home-making, a baseball game, and an opportunity for sociability. The school has a small library of good books and a collection of 4,000 agricultural bulletins, which are loaned to the farmers of the section. The principal of the school is a graduate of the New York State College of Agriculture. He teaches the sciences and agriculture in the school, leads many of the discussions at the moonlight socials, and acts to some extent as adviser to the farmers with whom he keeps in close touch by personal visits.

In September, 1909, four-year courses in agriculture were introduced into six high schools in Michigan, into four others in 1910, and into five additional schools in 1911. The first six are located at Hillsdale, Hudson, Lawton, North Adams, Otsego, and St. Louis; the next four at Northville, Saline, Union City, and Watervielt. The courses introduced at the beginning of the present year were in the high schools of Mason, South Haven, St. Johns, Traverse City, and Manchester. None of these schools receives State aid. The agricultural work is under the supervision of the professor of agricultural education in the State agricultural college. The courses are taught by graduates of the college who in most instances teach other sciences as well. The average annual additional cost of maintenance by the introduction of such courses was $360. Of the 494 boys enrolled in the 10 schools teaching agriculture in 1910–11, 57½ per cent elected the courses in agriculture. The agricultural work in all of these schools requires one-fourth of the student's time, the course being practically the same: First year, agricultural botany; second year, farm crops, soils and tillage, horticulture and entomology; third year, live stock, dairying, soils and soil physics; fourth year, live stock improvement and feeding, poultry, farm management, farm mechanics, and machinery. The work follows closely a syllabus for the guidance of the instructors published by the State agricultural college.

A private secondary school at Winona Lake, Ind., known as the Winona College of Agriculture, is an institution of a distinct type among agricultural schools. In this school nothing but agriculture is taught and this agriculture is intended to be in the form that can be best applied to the actual problems of the farm and its different developments. The course requires two years to complete and is given below. A choice of one of the three following subjects, each requiring 12 hours a week, is given in the spring term of the second year: Advanced live-stock management, advanced work in soils, and commercial orchard management.

About one-fourth of the time in all of these courses is given to laboratory work, the major portion of which is carried on at the school farm where the student works under the direct supervision of the instructor. In addition the curriculum is so arranged as to give each student actual work in all phases of farming. The institution has

3 instructors who are graduates of State agricultural colleges. It has graduated 5 classes including about 60 boys, nearly all of whom are now engaged in actual farming. The enrollment for the past year was 67. A common-school education is necessary for admission. Students are graded in two divisions according to their ability to do more or less difficult work. The course of study is as follows:

Course of study in the Winona College of Agriculture.

Subjects.	Hours per week.					
	First year.			Second year.		
	Fall.	Winter.	Spring.	Fall.	Winter.	Spring.
Bacteriology					4	
Botany	4	3				
Breeds and breeding	5	4			2	
Agricultural chemistry	5	5				
Farm crops			5	5		
Diseases of animals				3		
Dairying	3	5			4	
Entomology	1		3			
Agricultural economics						3
Farm machinery	5					
Farm management					5	
Farm engineering						5
Farmers' institutes	1	1				
Feeds and feeding			3	5	4	
Orchard fruits			4			
Small fruits	4					
Forestry				3		
Landscape gardening				2		
Poultry		3	4			
Soils and fertilizers				5		
Soil physics			4			
Shop work		2			5	
Vegetable gardening			3			
Soils, livestock, or orchards						12

PREPARATION OF TEACHERS IN SECONDARY AND ELEMENTARY AGRICULTURE.

IN STATE AGRICULTURAL COLLEGES.

The introduction of instruction in agriculture into the school curriculum has created a greater demand for teachers with special training for the work than can at present be supplied. While agriculture as a high-school science is being rapidly rounded into pedagogical form, it is yet so far in the experimental stage of its development that teachers with special training are essential. Probably no factor has had more influence in retarding the introduction of instruction in this subject into the public schools than the lack of instructors properly qualified, with training in both pedagogy and in technical and practical agriculture.

The majority of such teachers must be supplied by the State colleges of agriculture and mechanic arts. To encourage these institutions to prepare special teachers of agriculture, Congress, in the

Nelson amendment to the appropriation bill for the Department of Agriculture, approved March 4, 1907, providing further aid to the colleges of agriculture and mechanic arts established under the provisions of the land-grant act of 1862 and receiving the benefits of the act of August 30, 1890, added the proviso "that said colleges may use a portion of this money for providing courses for the special preparation of instructors for teaching the elements of agriculture and the mechanic arts." Under this act each State is now receiving annually for the benefit of its college of agriculture and mechanic arts the sum of $25,000.

A special inquiry was made of these institutions by the Bureau of Education during the past summer to determine what each is doing to prepare special teachers of agriculture. There are 50 of these colleges, not including the separate institutions for colored students; 12 of them are offering no special courses for students preparing to teach, although many of their graduates with no preparation but their general college course and technical agricultural courses have become instructors in agriculture in secondary schools; 3 of these offer summer-school courses in agriculture for elementary teachers. Thirteen others, having already a department or school of education when the act of Congess was passed, now allow students in the agricultural courses to elect certain courses in education. Ten others have added courses in psychology and general education, and 13 have added departments of agricultural education, which give courses in methods of teaching agriculture and in school agriculture as well as in general pedagogy. Nine offer special one or two year courses for teachers of agriculture, and 30 conduct summer schools offering courses in agriculture for elementary teachers. The departments of agricultural education in many cases are giving special aid to instructors in public schools teaching agriculture, and are also giving special instruction in agricultural pedagogy and agriculture for teachers in summer schools. Among the 17 institutions for colored students, Hampton Institute (Virginia) is the only one preparing special teachers of agriculture; 8 others require pupils in their normal course to take an elementary course in agriculture.

The following paragraphs give in brief form the names of the institutions which are offering special preparation for teachers of elementary agriculture with the courses in agricultural education where such courses are given. All courses are stated in semester-hours, a semester-hour being one hour a week for a semester, or half year.

Alabama Polytechnic Institute.—Two senior courses: Methods of teaching agriculture; methods of teaching horticulture and school gardens; two-thirds semester-hour each. Summer school: Elementary agriculture; methods of teaching agriculture. The extension

department employs 4 men, whose time is devoted largely to visiting schools and aiding in teaching agriculture.

University of Arkansas.—Courses in education are elective for agricultural students.

University of California.—Offers 7 distinct courses in agricultural education: Garden and garden practice (3 semester-hours); agricultural nature study (3 hours); agriculture in elementary schools (2 hours); supervision of agriculture in elementary schools (2 hours); agriculture in secondary schools (2 hours); the practice of teaching agriculture, and individual study of special topics (graduate courses). Agricultural students may elect professional courses in education in the school of education. Summer school: 8 courses in nature study and agricultural education. The department of agricultural education has 3 instructors who devote part of their time to aiding instruction in nature study, school gardening, and agriculture in the public schools, assisting at teachers' institutes, and preparing circulars and bulletins on agricultural education.

Colorado Agricultural College.—Thirteen semester-hours of elective work in psychology, history of education, and the theory and practice of teaching was added in 1910.

Connecticut Agricultural College.—Summer school courses: Nature study, elementary agriculture, and methods of teaching agriculture.

University of Florida.—Students who have completed 2 years in the agricultural course may elect for their junior and senior years the agricultural-pedagogical group of studies which includes 28 semester-hours general education and 22 hours elective agriculture.

Georgia State College of Agriculture.—Four courses in education (12 hours) are open as electives to agricultural seniors. Summer school courses: Agriculture, nature study, education.

University of Idaho.—The department of agricultural education offers 5 courses: Development of agricultural education (2 hours); methods of teaching agriculture (2 hours); rural sociology (3 hours); agricultural economics (3 hours); and methods in agricultural extension (3 hours). Agricultural students may elect 10 hours' work in general education.

University of Illinois.—A special 4-year course for prospective teachers of agriculture is given, including 63½ hours general agriculture, 28½ hours allied sciences, 6 hours agricultural education, 8 hours general education, 2 hours economics, and 22 hours elective in foreign languages, history, or literature. Students in the general agricultural course may elect 8 hours in general education and 10 in agricultural education. Courses in agricultural education: Principles and methods of high-school agriculture (5 hours); elementary agriculture (5); nature-study agriculture (5). Summer school courses:

Secondary-school agriculture; common-school agriculture; history of industrial and vocational education; nature study; general education.

Purdue University (Indiana).—Agricultural students may elect 6 courses (18 semester-hours) in psychology and pedagogy.

Iowa State College.—The department of agricultural education, established in 1911, offers a 4-year course containing 60 hours of agriculture, 29 hours of closely allied sciences, 16 hours general education, and 2 hours in methods of teaching agriculture.

Kansas State Agricultural College.—Twelve hours' work is offered in general education. College graduates and others qualified, preparing to teach agriculture, are offered a 1-year course consisting entirely of regular college courses in agriculture. Summer school course: Agriculture for teachers. Correspondence courses in agriculture are open to teachers.

University of Kentucky.—Students in the department of education may elect certain courses in agriculture. Summer school courses in agriculture for teachers are given.

Louisiana State University.—Students in the teachers' college may elect 2 courses in the college of agriculture, general agronomy (3 hours), and elementary horticulture (4 hours). Summer school offers 9 courses in agriculture and 3 in agricultural education.

University of Maine.—A special 4-year course for agricultural teachers is offered, including 50 semester-hours agricultural subjects, 11 hours education, and 89 hours English, mathematics, sciences, and free electives; also a special 1-year course open to college graduates, high-school teachers with 2 years' experience, and normal graduates with 3 years' experience in teaching. The course consists of agriculture, horticulture, school gardening, agricultural chemistry, botany, entomology, and bacteriology. Summer school offers courses in agriculture and in education. Correspondence courses in agriculture are open to teachers.

Massachusetts Agricultural College.—The department of agricultural education, established by provision of the State legislature in 1907, offers 5 courses: Meaning of education (3 hours); history and theory of vocational education (3 hours); methods in agricultural education (3 hours); teachers' agriculture, a selection and review of the agricultural sciences adapted to school work (3 hours); seminar in education with special reference to agriculture (3 hours). Seniors preparing for teaching have practical work with children in the college school gardens. Summer school courses are given in elementary agriculture, school agriculture, and in agricultural pedagogy. Correspondence courses are offered in agriculture, the principles of agricultural education, and practical exercises for grammar and high school teachers. The department devotes part of its time to aiding

the introduction and teaching of nature study, school gardening, and agriculture in the public schools. It has furnished the services of an instructor to the North Adams State Normal School who has devoted one-half of the college year to supervising instruction in agriculture and nature study at the normal school and its practice schools.

Michigan Agricultural College.—A department of agricultural education offers a 10-hour course, elective to seniors, in pedagogy in its special relation to teaching agriculture, with practice teaching; a special 1-year course is offered in technical agriculture, open to college and normal school graduates; summer courses are given in nature study and agriculture for teachers.

University of Minnesota.—One course in agricultural pedagogics (3 hours). Four courses in education are open to agricultural students. A special 2-year agricultural teachers' course is given, including courses in agriculture and education. Summer courses: Agriculture for teachers, agricultural pedagogics.

Mississippi Agricultural and Mechanical College.—A "School of Industrial Education" gives a 4 years' training course for agricultural teachers for secondary schools, and a 2 years' course for teachers for elementary schools. The 4-year course includes 26 semester hours agriculture, 34 hours general sciences, 20 hours pedagogy, and 122 hours of English, mathematics, modern languages, and history. The 2-year course includes 17 semester hours agriculture, 10 hours general science, 10 hours pedagogy, and 62 hours English, history, geography, and mathematics. Summer courses: Agriculture for teachers, pedagogy.

University of Missouri.—School of education courses: Administration of agricultural education (1 hour); soils and plant culture (5 hours); animal husbandry (5 hours). The two latter courses are intended for teachers and presuppose no courses in agriculture. Courses in agriculture may be accepted toward the degree of B. S. in education. To secure a special teacher's certificate as a teacher of agriculture the student must complete 15 hours in agronomy, animal husbandry, and horticulture. Summer courses: Agriculture and agricultural education. A professor of rural education aids rural teachers in teaching agriculture, through personal supervision and special bulletins.

University of Nebraska.—The department of agricultural education offers two courses: Agricultural economics (3 hours); agricultural pedagogy (2 hours). Agricultural students may elect 8 semester hours in professional education. A special 1-year teachers' course in technical agriculture is given for rural and grade teachers, which includes 48 semester hours agriculture and agricultural sciences; a 1-year special course for high-school teachers includes 10 semester hours agriculture, 18 hours general science, 2 hours forestry, 4 hours

agricultural economics, and 5 hours manual training. Summer school course: Agriculture for teachers.

University of Nevada.—A six-hour course in education is elective to agricultural students.

Rutgers College (*New Jersey*).—A course of 14 hours in pedagogy given in the college of arts and science is elective to agricultural students.

New Mexico College of Agriculture and Mechanic Arts.—Three courses in general pedagogy (15 hours) are offered, open to agricultural students.

Cornell University (*New York*).—Agricultural college students may elect courses in psychology and education in the college of arts and science. A special 2-year course in nature study includes 7 hours nature study and 24 hours agriculture. Summer school courses: Elementary agriculture, nature study, education.

North Carolina College of Agriculture and Mechanic Arts.—A 1-year course and a 2-year course for rural teachers are offered. The former is made up entirely of agricultural subjects, and the latter includes 32 semester hours agriculture. A 3-weeks' course in nature study and agriculture for teachers is given each May.

North Dakota Agricultural College.—Students who have completed the work of the first 2 years in agriculture are offered a special 2-year course in preparation for teaching. This course includes agriculture (35 hours); education (19 hours); English, mathematics, physics, and social science (112 hours). The work in education includes a 2-semester-hour course in agricultural and industrial education. The department of education gives a 4-year course in education in which agriculture is an elective subject.

Ohio State University.—The College of Education offers 4 courses in agricultural education: The elements of general agriculture (6 hours); the teaching of agriculture in the high school (4 hours); teaching elementary agriculture (4 hours); rural life and institutions (2 hours). Students in education may elect technical courses in the college of agriculture. Summer school courses: Agriculture for teachers, elementary and secondary agricultural education. An assistant professor of agricultural education devotes a part of his time to developing instruction in agriculture in the public schools.

Oklahoma Agricultural and Mechanical College.—Agricultural students may elect 3 courses in education (10 hours). Normal training students are required to take 3⅓ semester hours elementary agriculture and may elect 34 semester hours agriculture in addition and several courses in agricultural sciences. Summer school courses in elementary agriculture for teachers are given. A professor of "agriculture for schools" devotes his entire time to aiding persons engaged in teaching agriculture in the public schools.

Oregon Agricultural College.—Agricultural students are offered 17 semester hours elective work in education. This includes 4 hours' work in special methods of teaching agriculture. Summer courses in agriculture are given.

Pennsylvania State College.—Agricultural students may elect courses in psychology and education. Summer school courses in agriculture for teachers are given.

University of Porto Rico.—Regular 2-year course is given in the normal department leading to a special teachers' diploma in agriculture. Summer school courses in agriculture for teachers are given.

Rhode Island State College.—A 4-year teachers' course in applied science is offered, which includes 10 hours psychology and education and 33 hours agriculture. Summer-school courses: Agriculture, nature study.

South Dakota State College of Agriculture and Mechanic Arts.—A 12-hour course in psychology and education is elective to agricultural students. Summer-school courses in agriculture are offered.

University of Tennessee.—A special 4-year course for teachers of agriculture offered in the school of education includes 18 hours agriculture and 15 hours psychology and education. Summer-school courses: Education, nature study, agriculture for teachers.

Agricultural and Mechanical College of Texas.—Summer-school courses: Agriculture in the public schools, agriculture for teachers, education, psychology.

Agricultural College of Utah.—Summer-school courses: Education, agriculture for teachers, nature study.

University of Vermont.—Students who have completed the first 2 years' work in the agricultural college may take a 2-year special course in preparation for teaching, including 18 semester hours education, 36 hours agriculture, and 18 hours elective. Summer-school courses: Agriculture for teachers, education.

State College of Washington.—Students in agriculture may elect 20 hours of psychology and education and a 2-hour course in "Methods of teaching agriculture." Summer-school courses: Education, agriculture for teachers.

West Virginia University.—Students preparing to teach agriculture may substitute 6 courses in education (20 semester hours) for electives in agriculture, including one course ($3\frac{1}{3}$ semester hours) in agricultural education. Summer-school courses: Agriculture for teachers, education. A member of the faculty devotes a part of his time to aiding and supervising instruction in agriculture in public schools.

University of Wisconsin.—Agricultural college students may elect 6 semester hours in education and 2 semester hours in agricultural education; students in the teachers' training courses in the college of

letters and science may elect 18 semester hours in agriculture and 2 hours in agricultural education. Summer courses: Agriculture for teachers, agricultural education, education.

University of Wyoming.—Agricultural students may elect work in education in the normal school department.

Alabama Agricultural and Mechanical College for Negroes.—Students in the normal course are required to take 20 semester hours in agriculture, distributed through the 4 years of the course.

Florida Agricultural and Mechanical College for Negroes.—Students in the normal course may take a few courses in agriculture. Summer-school courses and correspondence courses in agriculture are open to teachers.

Kentucky Normal and Industrial Institute for Negroes.—All normal pupils are required to take an elementary course in agriculture.

Princess Anne Academy, Maryland (colored).—All normal pupils are required to take 14 hours of general agriculture as classroom work and practical work in either agriculture or the industries.

South Carolina Colored Normal Industrial, Agricultural, and Mechanical College.—All students in normal course are required to take courses in agriculture.

Prairie View State Normal and Industrial College for Negroes (Texas).—Normal students take elementary agriculture.

Hampton Normal and Agricultural Institute, Virginia (colored).—A special 1-year course is given for preparation of teachers of agriculture, open only to students who have completed the 3-year practical course in agriculture. A description of this course is given below under Agriculture in Normal Schools. Summer-school courses in agriculture for teachers are given.

West Virginia Colored Institute.—Senior normal students are required to take agriculture one term. A course in agriculture for teachers is given in the summer school.

IN STATE NORMAL SCHOOLS.

The inclusion of agriculture as a required subject for teachers' certificates in many States, and the demand in other States for instruction in agriculture in elementary schools, consolidated rural schools, and rural high schools, has forced many of the normal schools into offering courses to fill this demand. Of the 185 State normal schools in the United States, 104 offered courses in agriculture during the past year; 6 others, courses in school gardening; and 12, not counted in the 110 preceding, in nature study.

The majority of the courses offered are brief, extending from 4 to 12 weeks. A considerable number offer a full year's course, and the North Adams (Mass.) State Normal gives a 3 years' course. In most instances the courses deal almost wholly with plant life,

including a study of the problems most closely concerned with the growth and improvement of the plant. Some, in addition, are including a special study of horticulture and floriculture, and others poultry, animal husbandry, and dairying. The subject is taught in the majority of these schools by the instructor of the biological sciences, although at least a score have instructors who are graduates of agricultural courses in State colleges of agriculture and are devoting most of their time to the work in agriculture.

An outline of the agricultural work in a few of the institutions selected from various sections of the country is included below. The courses selected are fair types of the various courses given by the normal schools that are doing substantial work in agricultural education.

The State Normal School at Jacksonville, Ala., gives 120 hours in the fall and spring terms of the first year of the work for teachers' certificates to agriculture. The textbook used is that adopted by the State for the public schools. The work covers the principles of maintaining and restoring the fertility of the soil, with emphasis on methods of cultivation and fertilization; standard breeds of live stock; feeds and feeding; cultivation and care of orchards and vineyards, including grafting, pruning, and budding. The school maintains a small experimental and botanical garden, a vineyard, an orchard of small fruits, and a flower garden. The subject is taught by the teacher of science, who has had no special training in agriculture.

The Los Angeles (Cal.) State Normal School gives a 48-hour course in agricultural nature study. "The object of this course is to give students a broad, sympathetic outlook upon agriculture, and to prepare them for teaching the essentials of this most fundamental occupation in a practical way. Each student is assigned a plot in the school garden, and in this are planted and cared for various vegetables and flowers." The institution is equipped with a greenhouse, a lath house, and land for school gardens. The agricultural work is confined almost wholly to a study of the many problems connected with the successful growing of plants. The instructor is a graduate of an agricultural college and gives his entire time to this work.

The State Teachers College of Colorado, at Greeley, maintains a department of agricultural education offering 9 courses. The work is arranged especially for rural teachers, and a special diploma in elementary agriculture is given to students completing the course. The institution is equipped with a farm, nursery, gardens, greenhouse, and stables. The instructor is a graduate of an agricultural college. The courses given by the department are as follows, each being a 60-hour course: Nature study, elementary agriculture, school gardening, soils and crops of the farm, animals of the farm; dairy

industry, and poultry husbandry; horticulture on the farm; the farm home; and rural sociology and the rural school.

The State Normal School at Athens, Ga., in the new four-year diploma course devotes 108 hours to general agriculture the first year and 72 hours the third year; also 72 hours to school gardening and 36 hours to rural economics in the fourth year. In the two-year diploma course, in the first year 72 hours are given to agriculture and 36 hours to nature study; in the second year 18 hours are given to nature study and 36 hours to school gardening. The teacher of agriculture is especially trained for teaching agriculture and devotes his entire time to that subject. The nature study also is taught by a graduate of an agricultural college.

The Illinois State Normal University, at Normal, offers 36 hours in agricultural nature study in the first year of the four-year course. The work is concerned largely with plant life. A course in experimental agriculture and practice teaching is given in the fourth year; this work includes individual experiments in agriculture, horticulture, floriculture, and the supervision of children in school gardens. These subjects are taught by the instructor in biology.

The North Adams (Mass.) Normal School offers courses in school and home gardening, agriculture, horticulture, and nature study. These courses are arranged and conducted with the cooperation of the Massachusetts Agricultural College, which adds to the faculty of the normal school an instructor and supervisor who gives a portion of his time to instruction at the normal school and its three training schools, a second portion to the promotion of elementary agriculture and nature study in the schools of Berkshire County, and the remainder to instruction at the college in the department of agricultural education.

A three years' agricultural course is offered, which includes all of the work in English, psychology, and pedagogy given in the regular two-year normal course. The agriculture in this course may be taken by a graduate of the regular two-year course, or by college graduates, in one year. The course is intended to prepare special teachers in agriculture. The strictly agricultural work is given by an instructor from the agricultural college; the allied sciences by the instructor in the natural sciences of the normal school. The course is as follows:

I. Agriculture: Soils; plant life, structures, functions, and diseases; fertilizers, tillage, crops; hotbeds, cold frames, and greenhouse; farm live stock, poultry, bees; dairy.

Horticulture: Flower and shrub gardens; window gardens; propagation, pruning, and cultivation; orchards and small fruits; forestry.

Insects and birds: Economic importance; control of injurious insects.

Farm buildings and machinery.
Sanitary science.
(Agricultural physics and chemistry involved in preceding topics.)
Rural social science.

II. Nature study: Its content and relation to science, literature, and vocational work.

III. Manual training: Carpentry, cabinet work, forge work, assembling farm machinery.

Drawing: Freehand and mechanical, structural and decorative design, use of color, farm and building plans.

IV. English, etc.

V. Pedagogy and psychology.

The Fourth District State Normal School, at Springfield, Mo., offers two elementary courses and one advanced course. The elementary courses together extend through five terms of five hours a week and include a study of plant life, soils and soil fertility, farm crops, grain judging, enemies and diseases of plants and their control, crop rotation, feeds and feeding, live stock, poultry, dairying, and general farm management. The advanced course is a two-year course and includes one term's work in each of the following: Dairying, animal husbandry, orcharding, farm management, poultry raising, and gardening. The institution has established a two-year agricultural high school, in which the students devote one-fourth of the time to agriculture or domestic science and one-eighth of the time to pedagogy as applied to rural school teaching. The course is intended to prepare young men and women for rural school work, and graduates will receive a State teacher's certificate to teach in rural schools. The institution owns a model farm and good equipment for agricultural instruction. The instructor in agriculture is a man trained especially for teaching that subject.

The Hampton Normal and Agricultural Institute (colored), at Hampton, Va., offers a three years' vocational course in agriculture and a special one-year course to students who have completed the vocational course and are preparing to teach agriculture. The one-year course includes the chemistry of soils, manures, and fertilizers; chemistry of dairy products; fermentation; milk testing; geology in its relation to soil formation; biology in its relation to plant and animal life; farm engineering, including a study of farm machinery and structures; and farm physics, including soil physics, the relation of the atmosphere to agriculture, climatology, and the organic life in the soil and air. Students taking this course are required to take also the teaching course in the training school, where they teach classes in agriculture under a critic teacher, and upon the completion of both courses they receive a special diploma.

CHAPTER X.

RURAL UPLIFT IN FOREIGN COUNTRIES.

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CONTENTS.

Introduction.—Measures for improving rural education in Scotland: Supplementary courses for rural schools; present status of supplementary courses; relations between supplementary courses and continuation classes; statistics of central institutions, technical or agricultural.

Measures for improving home life in rural parishes, Ireland: Itinerant instruction in domestic economy; central schools of housewifery.

The movement for agricultural education in England: Practical instruction in elementary schools; work of rural education committee; scheme of county organization.

Suggestive lessons from other European countries: Training of special teachers in Germany; itinerant housekeeping schools in Prussia.—Organized system of agricultural education in France.—Distinction between agricultural education and rural uplift.—Movement for popular enlightenment.

INTRODUCTION.

The similarity of the problems of social and of industrial life in modern states is illustrated by world movements in education which take the same general direction under widely differing social and political conditions. The great movement of the present time is that for giving practical direction to school training and thus fitting the mass of young people more directly for the duties and conditions which await them. In the cities the purpose is conveniently termed "vocational." As regards rural districts, it is not so easily defined nor so readily brought into systematic form; on the other hand, the new educational purpose is there more closely related to the general social life and becomes, therefore, a part of the larger rural improvement problem. But, again, the conditions of rural life differ more widely in different countries than do the conditions of city life, and therefore experiments in rural education in one country are often not at all applicable to another. On the contrary, it has already been made clear that vocational training in cities may be reduced to a few general principles of wide application. This is the service that Dr. Kerschensteiner has rendered by his expositions of the movement in

Munich. He emphasizes the universal element in particular experiments which he discusses.

The new movement in rural education has spread to the whole world, and in almost every country has given rise to special efforts, which are instructive either as regards method or organization or adaptations. In English-speaking countries these efforts have taken one of two courses; they have been from the first either offshoots from the organized system of public education or they have arisen independently of the system.

MEASURES FOR IMPROVING RURAL EDUCATION IN SCOTLAND.

In every measure affecting the public provision for education in Scotland, two purposes are evident: (1) That of giving equal opportunity to all children; (2) that of keeping all experiments in education within the province of the main system. At the same time there is a growing sense of distinctions between communities and individual children that must be considered for the highest interest of the individual as well as for the general welfare.

This dual purpose gives character to the supplementary courses authorized in elementary schools by a circular of instruction issued by the education department in 1903.[1] In this circular the department expresses the conviction, based upon a careful consideration of facts, "that the tendency—not confined to any one class of school—to make one and the same school with one and the same staff serve many different functions is the weak point of educational organization in Scotland as compared with that of other countries, with which, in other respects, Scotland might justly challenge comparison, and they are satisfied that increasing division of function as between different types of schools is an essential condition of further educational progress."

The supplementary courses, intended to provide for differentiation at an elementary stage, take the place of the last two or three years of the ordinary course; pupils are admitted to them who have reached at least the fifth class of the regular course (normal age 11 years) and who pass the required tests of qualification for the supplementary work. The authorized subjects of the courses are arranged in four groups: (1) Commercial, (2) industrial, (3) course for rural schools, (4) household management (for girls). Detailed schedules under each division are published by the education department to serve as models, and special grants are allowed for the pupils attending. Apart from the conditions mentioned, the school authorities have large freedom in respect to the work.

[1] Circular 374, Feb., 1903.

Although the supplementary courses are not limited to rural schools, it is explicitly stated in the circular above referred to that in considering the problem the authorities have had constantly in mind the position of the small rural school taught by one teacher. The official programs which follow pertain to schools of this character.

SUPPLEMENTARY COURSES FOR RURAL SCHOOLS.[1]

Subjects common to all the supplementary courses, whether in cities or in rural districts, are:

A.—*The study of English.*

The main object of this study shall be to create a taste for good literature. The chief means of carrying on this study should be—

(1) Systematic home reading, with properly directed choice of books.
(2) An efficient system of reviewing, explaining, and testing in school the reading done at home.
(3) The committing to memory, after discussion and explanation, of suitable pieces of verse and of prose.
(4) Systematic teaching and practice of English composition.

B.—*Certain studies bearing upon matters which it is of concern that all the pupils should know, whatever their occupations in after life are to be.*

Under this heading may be specified—

(1) The laws of health.
(2) Money matters—thrift, investment, insurance.
(3) The conditions of trade and employment.
(4) The institutions of government under which we live.
(5) The Empire—its history, growth, and trade; our colonies and the openings for enterprise which they afford.
(6) Nature study, drill, and singing.

It is advised that in connection with civic instruction full use be made "of the specially prepared edition of the Ordnance Survey map of the district in which the school may be situated."

Special for rural schools.

(1) *Nature study.*—Continued so as to secure on the part of the pupils familiarity with—

(*a*) The rocks, soils, and plants of the district;
(*b*) The life histories of weeds and insect pests, with the remedies against them;
(*c*) Wind and insect pollination of plants;
(*d*) Relations of air, water, and soil to vegetable and animal life.

NOTE.—Instruction in the above subjects must throughout be of a *practical* character. To this end, school gardens should be formed and made use of; observations on bees and beekeeping should be made where possible; and advantage should be taken of any agricultural experiment stations in the neighborhood.

When the instruction is of a sufficiently practical character, given through the medium of a school garden, special grants will be allowed.

(2) *Geometry.*—As in the industrial course, but more especially in its applications to land measuring and surveying.

[1] Scotch Education Department: Code of regulations for day schools, 1911, pp. 29–31.

(3) *Study of newspaper market reports.*—With exercises and calculations based upon them.

(4) *The keeping of accounts.*

(5) *Optional.—Woodwork* (or *ironwork*) as above.

Household management (girls') course.

(1) *Housekeeping.*—Including—

(*a*) Care of rooms, furnishings, and clothing;
(*b*) Marketing, and the keeping of household accounts;
(*c*) Cookery;
(*d*) Laundry work;
(*e*) Needlework—especially mending, darning, and cutting out.

NOTE.—All the above subjects must be taught *practically.*

(2) Special extension of such topics as bear upon the health of the individual and of the family.

(3) *Arithmetic.*—As applied in the calculation of prices and the practical use of the common weights and measures.

(4) *Scale drawing.*—As applied to the making of diagrams for cutting out (optional).

(5) *Dressmaking,* and the use and care of the sewing machine (optional).

PRESENT STATUS OF SUPPLEMENTARY COURSES.

The following information relative to the general working of this important adjunct to the elementary schools is derived from the latest report of the Scotch Education Department covering the year 1909–10.

In order to assist rural districts in maintaining supplementary courses the education committees of several counties, in particular Midlothian and West Lothian, have come to the help of the school managers by employing, in each case, a staff of special teachers for supplementary courses whose services may be obtained by rural school boards on reasonable terms. These committees also show every disposition to assist school boards in providing equipment required for the supplementary studies, and it is believed that in another year supplementary courses will be in operation in every parish in both counties.

The most satisfactory results have been obtained with school gardens and with the classes for girls. This is the common experience in all sections of Scotland. A subinspector in Fife, commenting on this fact, says:

It is not difficult to arrange practical courses for girls. Everybody sees the point of cookery and laundrywork—the mothers especially, and (what is no less important) the girls themselves. With the boys it is not so easy. The industrial centers in Fife are not large enough for real trades schools, having a distinct bearing on the occupation of apprentices. Practical geometry, mensuration, and woodwork have a real bearing on many trades, but it is not so direct and obvious as is the case with practical work of the girls. In the mining centers it has been possible to organize courses that bear very directly on mining, because in these centers 9 boys out of 10 go into the pits. And this is

probably the secret of the comparatively greater success of the boys' courses in these districts.

The inspector for the western division of Scotland, after commenting on the success of the supplementary courses in populous industrial centers, continues:

It is, however, particularly gratifying to be able to state that rural districts, like Dumfries, Kirkcudbright, and Wagtown, are awakening to the educational needs of their localities in this direction.

Special success attained by the school gardening classes, carried on at Kilmarnock, is attributed by the inspector to the thoroughly practical and stimulating instruction given by Mr. Hosking, the gardening expert appointed by the West of Scotland College of Agriculture. This gentleman holds conferences with the teachers and visits the schools in which it is proposed to take up the work, and outlines their methods and plans.

Many of the school gardens were started originally for the purpose of nature study, and they are now turned to the service of practical training without loss to the earlier interest.

The manner in which the school gardens are developed is illustrated by the following statement from the inspector's report:

One of the best gardens that came under my notice was that connected with the central public school of Kirkmaiden, the most southerly parish in Scotland. The headmaster was a pupil of Mr. Hosking, at Kilmarnock. Mr. Hosking, I understand, paid several visits to the garden in the course of the year, giving valuable guidance and stimulus. Through the intelligent sympathy of the chairman of the school board, everything needed in the way of tools and general equipment had been supplied on the most ample scale. The headmaster evidently entered enthusiastically into the work, and the result, as might be expected under these conditions, was most successful. The pupils were keenly interested. A knowledge of how to grow all ordinary garden vegetables and garden flowers had been imparted, and I am convinced that the interest excited and the skill acquired could not fail to react beneficially on the whole work of the school. Another garden meriting special attention is the one at Wallace-hall Academy, carried on under the direct superintendence and guidance of the rector, Mr. Menzies.

It may perhaps be objected that it is a somewhat narrow and limited view to take of the educational aims of the school garden to grow ordinary vegetables and flowers, and that a wider conception of its functions should include experimental testing of the value of different manures on different crops—in short, that the school garden should be, as it were, an out-of-door agricultural laboratory. The one view, however, does not necessarily exclude the other, but I think it may be reasonably maintained that it would be well at the start to limit the educational aims of school gardening to the most familiar and readily learned processes of the ordinary cottage garden. As the scheme develops and time goes on, it will, naturally enough, embrace, in greater or less measure, the wider conception, and from the first, the judicious teacher will constantly turn it to account in connection with the nature study of the school. Gardening, indeed, is, in its essence, nature study of the very best type.

The inspectors and experts interested in the practical side of rural supplementary courses generally agree as to the essentials for suc-

cess. Teachers, it is declared, must be specially trained for the work; counties must aid by maintaining staffs of itinerant teachers and by helping in the expense for equipments, such as garden tools, workshops, etc., and small parishes must be combined for the support of supplementary courses at a common center. It is necessary, also, to do a great deal of missionary work to overcome the preference for theoretical studies and the opposition of parish school boards to increased expenditures.

RELATIONS BETWEEN SUPPLEMENTARY COURSES AND CONTINUATION CLASSES.

The desire to preserve the unity of the school system and to avoid unnecessary expense has led to efforts for utilizing supplementary courses as continuation classes—that is, classes intended for young people who have passed the age of exemption from day-school attendance (14 years) and are engaged in industrial pursuits. The plan of combining the continuation classes with the supplementary courses is encouraged by the offer of special grants from the education department for young people beyond the school age who attend the latter courses on certain afternoons of each week in the winter session.

The authority conferred on school boards by the education act of 1908 to make attendance upon continuation classes compulsory is being very cautiously exercised. Meanwhile, the most progressive boards are endeavoring by the provision of suitable instruction at convenient hours, by conferences with employees and associations of workmen, and by cooperation with other agencies, to stimulate voluntary attendance upon the classes. It is specially noted in the official report that the first proposal of by-laws for compulsory after-school instruction has come from rural boards; to the school board of Hoddam, Dumfriesshire, belongs the distinction of having the first provisionally approved set of by-laws under this section. Other sets are at present under consideration.

The continuation classes have hitherto been most flourishing in cities and centers of technical industries, but under the present interest in rural education, plans are rapidly being formed for the provision of agricultural classes. In addition to short-term classes, continuation courses of three years' duration have been organized in a few counties, which prepare pupils to enter some one of the central institutions, technical or agricultural. These central institutions are a development from the provision of evening classes fostered originally by the science and art department in the interests of adults desirous of instruction in science and in the technique of various trades. In 1900, when the administration of the grants for science and art passed to the Scotch Education Department, the policy was adopted of selecting certain institutions for the continuance of the work of the

evening classes. The selection in each case is made by the department with reference to the general standing of the institution and its convenient location for the purposes intended. As a condition of receiving the Government grants, which are made practically on the basis of meeting any deficiency in current expenditures, the institutions selected, on their part, submit to official supervision and inspection and report annually to the department. In addition to the evening classes, maintained as explained, these institutions also have well-organized day classes in technical, scientific, and trade subjects. They are, in fact, developing great importance as technical institutions; the day courses of instruction are maintained at university standards and lead to a diploma. These institutions, to which the term central is applied, form thus a link between the public-school system and the universities, and by the arrangements above explained there is the possibility that a pupil beginning with the supplementary course of an elementary school may make steady advance to a high order of scientific and technical training.

As regards rural communities, the system in its entirety has hardly yet been put into operation. Even in the most progressive districts it has been found impossible to secure the attendance at continuation classes of more than 25 per cent of the youth between 14 and 18 years of age, and the conviction is very strong that without compulsion little more can be accomplished.

From the table of central institutions, given below, it will be seen that 3 only out of a total of 16 are special to agriculture; the 3, however, are so placed as to meet the requirements of the entire county.

Table showing the number of students instructed in, and the grant made by the Education Department to, central institutions, Scotland, 1909–10.

Names.	Number of students instructed.		Grants from the departments.		
	Day	Evening.	£	s.	d.
Aberdeen and North of Scotland College of Agriculture	[1] 109	[1] 265	8,975	4	9
Aberdeen, Robert Gordon's Technical College	64	553	2,376	6	11
Dundee Technical College and School of Art	10	1,076	3,743	17	0
Dunfermline College of Hygiene and Physical Training	[2] 45	.....	1,659	17	3
Edinburgh and East of Scotland College of Agriculture	[1] 163	[1] 224	6,294	0	7
Edinburgh College of Art	363	480	7,569	2	6
Edinburgh Heriat-Watt College	210	2,866	6,306	18	1
Edinburgh Royal (Dick) Veterinary College	[2] 89	.....	300	0	0
Edinburgh School of Cookery and Domestic Economy	[2] 1,508	[2] 238	.....		
Glasgow and West of Scotland College of Domestic Science	[2] 715	.....	1,350	10	8
Glasgow and West of Scotland Technical College	475	4,736	18,407	17	9
Glasgow Athenæum Commercial College	150	1,235	1,508	12	7
Glasgow School of Art	380	343	5,962	8	8
Glasgow Veterinary College	[2] 44	.....	250	0	0
Leith Nautical College	235	51	699	2	8
The West of Scotland Agricultural College	[3] 111	[3] 111	8,601	4	8
Total	4,671	12,178	74,005	4	1

[1] Central classes only.
[2] Recognized as a central institution since the passing of the education (Scotland) act, 1908.
[3] Central classes only, and not including 240 students who attended at Kilmarnock Dairy School.

MEASURES FOR IMPROVING HOME LIFE IN RURAL PARISHES, IRELAND.

Ireland presents the extreme example of an extended work in agricultural education entirely separate from the elementary schools of the country. This system is carried on under the auspices of the department of agriculture and technical instruction at Dublin, and its main features, as developed under the vigorous influence of Mr. (now Sir) Horace Plunkett, have attracted universal attention and have been very fully discussed in reports of this office. The effect has been wonderful upon the agricultural prosperity of the country, but something more was needed to improve the home life of the country people. Recently efforts have been made, under the stimulating guidance of the department of agriculture, to supplement the work already carried on by provision for the domestic training of young women. The instruction of this order given in secondary and special schools reaches the better classes or trains teachers of the subject.

ITINERANT INSTRUCTION IN DOMESTIC ECONOMY.

In order to reach the poorer classes of young women in the country, a system of itinerant instruction in domestic economy has been organized in every county of Ireland under the general plan outlined as follows:[1]

Short courses of instruction in cookery, laundry work, and sewing are provided continuously throughout each session by itinerant instructresses working under the direction of county committees of technical instruction, such courses being held where technical schools or permanent classes are impossible.

Applications are made for these courses at the commencement of the session by the localities in which the instruction is considered desirable. These applications are discussed by the county committees of technical instruction, who, as a rule, are only able to grant a fraction of the applications. So highly is the instruction valued that it is no uncommon experience for a committee to receive a fourth or fifth application from one center.

On the receipt of a letter from the county secretary for technical instruction, notifying the applicant that the services of the instructress will be at his disposal for the period arranged by the county committee, a local committee is formed and a local honorary secretary chosen. The details of the course as to time and place having been arranged, the local secretary is supplied with suitable bills for distribution, announcing the date of commencement, duration, place, time, and scope of the course.

Success or failure depends to a very large extent on the encouragement and help that the individual members of the committee give to the students.

The manner in which this plan is carried out is illustrated by the following particulars of a single itinerant course reported in the official journal referred to.

[1] Department of Agriculture and Technical Instruction for Ireland Journal, April, 1910, pp. 467–468.

This course was held at Clonaslee, a small village of 240 inhabitants, situated in Queen's County. The industries of the village people are purely agricultural.

The instruction at this center was confined to: Cookery (20 lessons); home sewing and dressmaking (10 lessons). Owing to the paucity of suitable students, only one class a day was found to be necessary. The cookery lessons consisted of instruction and practice in preparing and cooking plain and ordinary dishes, and included such useful information as the management of the range, choice and selection of foods for meals, and the utilization of scraps; recipes for foods, etc., required by sick persons. The course also included simple instruction in hygiene, as, for example, the impurities common in water and "prevention is better than cure."

Instruction was also given in simple household accounts and the use of the post-office savings bank, and five-minute lectures were given on such subjects as cleanliness in dairies, the cultivation of vegetables, etc., use being made of the leaflets issued by the agricultural branch of the department.

Seventeen names had been enrolled for this class, which was held from 4 to 6 p. m.; an average attendance of 15 was secured.

The course in home sewing included lessons in darning, mending, and patching; the construction, use, and care of the sewing machine; the making of patterns and cutting out. The garments made were chiefly such as are worn by children. Only 14 students were enrolled in this class, and the average attendance was about 9.

The ages of the students varied from 14 to 30 years, the average being about 20 years. Ten of the students were attending for the first time, 5 for the second, and 2 (schoolmistresses) for the third time. The majority of the students were engaged during the day at farm work, but several housekeepers were among the most regular of those who attended, as also were the school teachers.

Some of the county committees stipulate that the net cost of conducting one of these courses should not exceed £5. It is now found by the more experienced instructresses that the cost may be kept well within this limit. Judiciously made contracts with the local tradesmen and a careful supervision of the bills of supply have done much to reduce the cost of these courses. The cost of the course which has just been described was £5 2s. ($24.78); the fees from 16 students and the sale of products supplied $11, or nearly half the cost.

In other centers, where a larger population exists, it is usual to form two classes, one meeting from 4 to 6 p. m. and the other from 7 to 9 p. m. The number of students admitted to each class is limited to 20 for practical instruction, and the course consists of 30 lessons.

When a course is completed, the instructress submits to the county committee a report dealing with the nature of the accommodation provided and the attendance of her students, and giving such information as is likely to be of use to the committee in forming an opinion of the value of the work. So far all reports have been very encouraging, both as to the interest of the people and the permanent results of the instruction.

CENTRAL SCHOOLS OF HOUSEWIFERY.

Provision for a higher order of domestic training has been made by the establishment of two central schools providing courses of instruction in housewifery, covering the entire range of domestic duties. The first of these schools was started some four years ago in the south of Ireland under the immediate direction of the nuns of the Ursuline Convent of Waterford. More recently the second school was opened in the north of Ireland at Northlands, Londonderry, through the cooperation of the principal of the Victoria High School, Londonderry, a school which had already gained an enviable reputation for its successful instruction in domestic subjects. In order to realize fully the end proposed for the new institution, it was decided, under the advice of the principal of the Victoria school, to erect a building and fit it up as an ordinary dwelling house, where the actual conditions of home life would be daily met.

The program of the school, which covers one year, includes, in addition to some literary work and the subjects which enter into the management of a house, a course of instruction in home hygiene and home nursing. The number of hours devoted each week to class instruction in the domestic subjects is as follows:

	Hours.
Cookery	6
Laundry work	2
Needlework, dressmaking, upholstery, etc	4
Housewifery	3¾
Preparation of notes and extra needlework	1½
Total	17¼

In addition to the practical work done during class instruction, the students in rotation undertake the following daily household duties:

Cleaning of rooms and staircases, kitchen, range, and stoves.

Preparation of kitchen and laundry for classes, marketing, etc.

Preparation of meals.

The course at Northlands is somewhat unique in that it combines the daily continuous work of a real household, including the unexpected and troublesome matters which of necessity arise, with the formal class lessons in all household subjects.

For the informal or practical management, the foundation was laid at the beginning of the course by the lessons in housewifery, and the test was given at the end by making each student responsible for a given time for the entire management of the house, which was furnished by the department in accordance with the advice of the principal of the school.

The diploma course of Northlands is sufficiently exhaustive for a girl to devote her entire time to it with due regard to recreation and fair leisure, but it is so arranged that a student may (by leaving out some of the subjects of housewifery proper) pursue some subject of art or literature.

There is also a combined course by which girls may proceed with their ordinary education at Victoria High School.[1]

The two central schools are indispensable in the general system of domestic training; they give importance to the work, furnish trained teachers to the cause, and present concrete examples of the art of home management. The influence of these special provisions is felt in the elementary schools. The number of schools giving instruction in cookery and laundry work steadily increases and the quality of the work improves.

On this subject the commissioners of national education, in their latest report, say:

> We have pleasure in reporting a very considerable increase in the number of schools in which courses in cookery and laundry work are taught to girls. On the 31st December, 1907, cookery was taught in 936 schools and laundry work in 167; on the 31st December, 1908, cookery was taken in 1,596 schools and laundry work in 227. During the school year now commencing (1909–10) we anticipate that these numbers will be substantially increased. Since we have taken steps to press for the inclusion of these subjects, and particularly the former, in the school program, we are gratified to be able to testify to the zeal and energy shown by a large majority of the managers and national teachers in seconding our wishes. We attach very great importance to the teaching of cookery to girls of 11 years of age and upward. Our programs of instruction are carefully designed to afford a series of practical lessons of a simple character adapted to the means and actual circumstances of the pupils. It is not our aim to give an elaborate course of lessons fitted to produce finished cooks or domestic servants, but rather to improve the habits of living of the people by training the pupils in the preparation of such simple dishes as may easily be produced from the ordinary foodstuffs that are available. The inculcation of cleanliness, order, economy, and thrift also plays a leading part in our programs of instruction in cookery. We recognize that many of our schoolrooms are not well fitted for the best teaching of this kind, and whilst we admit that such teaching as can be provided in our schools will not be so valuable as that which is to be got by attending the courses of instruction given by the county instructresses under the technical education committees of the several counties, we are satisfied that, unless some provision for the teaching of this subject be

[1] See Department of Agriculture and Technical Instruction for Ireland. Journal, July, 1909, pp. 711–717.

made in our schools, the great mass of the rural population must remain in ignorance of this vital subject.

THE MOVEMENT FOR AGRICULTURAL EDUCATION IN ENGLAND.

As a result of the "Small Holdings and Allotments Act of 1907," the educational needs of rural communities have assumed great economic importance in England, and the uplift of rural life and the improvement of agricultural processes are advocated with a zeal comparable to that which brought about the Elementary Education Act of 1870.

PRACTICAL INSTRUCTION IN ELEMENTARY SCHOOLS.

The importance of early instruction in subjects pertaining to the home life and work of pupils, whether in city or county schools, was recognized by the inclusion of cookery, laundry work, dairy work, and cottage gardening in the code of 1882, with the offer of a special grant for pupils passing the required tests in the subjects. Many of the former school boards made extensive provision for this practical training, and it has been carried on with great enthusiasm and excellent results by individual teachers. In fact, England furnishes admirable illustrations of the coordination of training in these arts with the ordinary subjects of instruction. The president of the board of education, in his speech on the education estimates for the current year, dwelt upon several such examples, which fact, alone, indicates their national importance. One of the typical cases which he cited was that of a school in Cheshire having 200 boys on the register, classified in five forms, with a head master, three trained certificated teachers, and one uncertificated. The school is in the country, but is located where it can be attended by town children. This school provides for the ordinary subjects, and, in addition, it has organized beekeeping, woodwork, gardening, and practical nature study; metal work and glasswork have just been introduced. The subjects of the general course of study, mathematics, drawing, elementary science, are all conducted with reference to the practical interest of the locality; for instance, to quote from the statement made to Parliament:

> Gardening is correlated with arithmetic and with English, for they have to write an account of all they have done, with nature study and with what is known as hand and eye work. Beekeeping is taught to all the boys; they regard it as very great fun, and 14 of them are known as "beekeepers." Seed testing is also conducted under the same rules. When my inspector first drew my attention to this he said he found in the workshop there was a garden frame being made. They were finishing off the garden gate. One scholar had been making a model of a weighbridge out of his own head. A good deal of attention was paid to nature study and drawing, and the school garden was planned by themselves, containing a number of beehives. There was every kind of experiment work, and the boys were cooperating in making a wind

pump from their own design, pumping water out of their own well. This is a really intelligent school, and what is remarkable in it is that in the ordinary dry subjects, the A B C of elementary school work, the children are more efficient than in any of the surrounding schools. I thought the head master had done good work there. I thought he had done such good work that I might have him on my staff, and I appointed him two months ago. The managers of the school, I believe, disapprove of the appointment, but I am going to use him, as soon as he has learned the ordinary routine of his work, to act as a missionary and to carry out in other parts of the country the results of his own experiment.

WORK OF RURAL EDUCATION COMMITTEE.

The present effort in regard to rural education in England has, however, a much broader purpose than that of imparting elementary notions of home and rural industries to children. It is concerned, more particularly, with the instruction of farmers and other persons engaged in agricultural pursuits, and with the improvement of agricultural processes throughout the Kingdom. It was with reference to these purposes that the rural education conference of 1909 was called, by the combined action of the County Councils Association, the Central Land Association, the Central Chamber of Agriculture, and the Farmers' Club.

Experts from other countries were invited to participate, among them Dr. James W. Robertson, organizer and director of the movement for rural education in Canada.[1]

The conference led to the formation of a permanent committee, which has entered upon an exhaustive inquiry into the conditions bearing upon the subject. This committee has already conducted an investigation into the means of promoting economy in the county systems of agricultural education by combinations of counties for the maintenance of directors, lecturers, etc., or by combinations between the county staffs and the staffs of central institutions, i. e., colleges or university departments of agriculture.

As a result of this preliminary investigation, the committee report the general situation in England in respect to county organization as follows: "The great majority of counties have some separate staff of their own, and the only grouping of counties is for the purpose of establishing or assisting to maintain a joint college or institute or (more often) arises out of association with such a center for agricultural education and research.

"The independent staff of the county is often supplemented, and their work often supervised by the staff of the center with which the county is in association."

The committee express the opinion that "as a general principle every county either should be associated, in combination with other

[1] See Report of the Commissioner, v. 1, ch. vii, 1907, p. 225–239; v. 1, ch. viii, 1910, p. 365–371.

counties, with an efficient center, or, if not in combination, should have a minimum efficient staff of its own"; further, that "in view of the difficulty of obtaining qualified teachers and organizers" it is desirable "to concentrate higher agricultural education, as far as possible, in a few really efficient centers."

The effect of the discussions and investigations here referred to, covering the entire problem of rural life and industries, is plainly seen in the increased attention to the educational side of the problem. Here, also, the organization of agencies is at present the chief concern.

SCHEME OF COUNTY ORGANIZATION.

The board of education, in the report for 1908–9, presents the following as a complete scheme of agencies for a county or a combination of counties:

1. Evening continuation schools for lads of 14 to 17 who have completed their day-school education at a public elementary school.
2. Local classes for young farmers which meet every day for a period of two to six weeks, or in the evening for two hours weekly throughout the winter.
3. Longer continuous courses for young farmers, lasting for two to six months, held at the county agricultural institute.
4. Series of from four to six lectures by the county staff instructors in special subjects such as manures, feeding stuffs, grasses and clovers, first aid to farm animals, poultry keeping, horticulture, rural cooperation.
5. Agricultural colleges serving as a rule more than one county area.
6. Classes, with competitions, in manual processes of the farm, such as plowing, hedging, thatching, hurdle making, sheepshearing.
7. Local demonstrations by the county staff in pruning, grafting, spraying, demonstration plots, advice by correspondence, county bulletins describing the results of county experimental work, methods of combating plant pests and diseases, new feeding stuffs, and manures.

The above is an ideal toward which the attention of counties is directed, but, in general, emphasis is placed upon one element of the scheme in one county and upon a different element in another, so that, taking the Kingdom as a whole, the work is partial and experimental.

In his review of the situation in a statement before the House of Commons, the president of the board thus touched upon the chief obstacle to the realization of a comprehensive scheme of rural education:

> The agricultural work conducted under the board in the West Riding has resulted in a great spread of agricultural education in the evening schools. At Bedford they have an excellent farm school. In Wiltshire they have an itinerant instructor, or more than one, in manual farm processes. In Lindsey, one of the greatest of the agricultural areas, they have agricultural scholarships which carry their scholars right up to our universities. In Nottinghamshire they train elementary-school teachers in rural subjects. All this is good work and is the growth of the last few years. But it is impossible that it should go on and be well done unless our instructors are paid good salaries. At present,

I am sorry to say, I find the best of the agricultural instructors, trained in the agricultural department at Cambridge, instead of finding employment under our own county councils, go out to the colonies.

The movement for a new order of rural education as it is developing in the English-speaking countries has a purpose far deeper than that of increasing the efficiency of one class of laborers; it looks to the entire life of communities, with emphasis on cooperative activity, the creation of social sympathies, community pride, and prosperity; restoration, in short, of unifying and humanizing influences that are wanting where labor and profit strike the keynote of the social order. It is noticeable that while the countries of central and western Europe preceded the British in provision for agricultural training, in perfecting its methods and systematizing its agencies, the work is taken up de novo, as it were, in Great Britain and Ireland. These countries have profited by continental experience, but do not blindly follow the same course. This fact emphasizes the relation that the educational effort bears to all the conditions—climatic, social, and commercial—affecting the industry itself. Above all, it emphasizes the relation of the movement to that local independence which makes public opinion the sustaining force of every cause in Great Britain. At that point English policy is identical with that of the United States, and English experience is therefore full of suggestion to legislators and educational authorities in this country.

SUGGESTIVE LESSONS FROM OTHER EUROPEAN COUNTRIES.

The countries of central and western Europe have all made abundant provision for the special training of agriculturists and teachers of agriculture, both as regards theory and practice. Further, the official courses of study for elementary schools, though uniform in respect to essential branches, comprise also subjects selected for their local adaptations. On account, however, of wide differences in political and social conditions, the organized systems of education and the auxiliary agencies by which popular instruction is reenforced in these countries do not offer to America models for imitation, but simply fruitful suggestions.

TRAINING OF SPECIAL TEACHERS IN GERMANY.

In Germany the training of teachers is a fundamental requirement for every order of instruction, and the teacher of any practical branch must add to professional training experience in the art before he can secure recognition. The staff of itinerant lecturers maintained by the agricultural department in the interests of the farmers must add to the usual qualifications ability as popular speakers and readiness in discussion. The official regulations in regard to the

preparation of teachers of agriculture in the schools devoted to that specialty are very explicit, and there are in Prussia two well-known pedagogical seminaries for training teachers for this work—one at Hildesheim and the other at Weilburg. The latest official regulations on the subject provide that after April 1, 1911, no one shall be appointed as professor of agriculture, even in the elementary schools of agriculture subventioned by the State, unless he possesses certificates proving (1) that he has at least the general education required for those who are admitted to the military service of one year; (2) that he has had four years of practical work in agriculture under proper supervision; (3) that he has pursued for three years the higher course in agricultural studies in a university or in a higher technical school, and that he has passed the examination for a professor of agriculture; (4) that he has successfully followed a professional course in a normal school.[1]

ITINERANT HOUSEKEEPING SCHOOLS IN PRUSSIA.

There is in Germany, as elsewhere, a rural-upliift movement at the present time, supported largely by women's clubs. Through the instrumentality of these associations itinerant or peripatetic housekeeping schools have been maintained for the service of rural communities with occasional aid from public funds. In Prussia the Government is now taking an active interest in the work, for which, according to consular advices, a subsidy will probably be included in the next budget.

ORGANIZED SYSTEM OF AGRICULTURAL EDUCATION IN FRANCE.

The system of agricultural education in France has been carefully organized in elementary schools and in normal schools, according to the provisions of the law of March 28, 1882, and many higher primary and modern secondary schools include a special section of agriculture. Apart from the provision for this branch as an integral part of general education, France is abundantly supplied with special schools of agriculture—schools that are models of organization, equipment, and method—and, as elsewhere noted in this report, the reorganized universities are zealously turning their resources to the service of agriculture. Notwithstanding this record bitter complaint is made that these elaborate provisions have failed to stop the exodus of young men from the farms under the alluring temptations of city life.

[1] Vorschriften für die Ausbildung und Prüfung der Landwirtschafts Lehrer, Berlin, 908.

DISTINCTION BETWEEN AGRICULTURAL EDUCATION AND RURAL UPLIFT.

The experience of France emphasizes the distinction between the development of agriculture and the uplift of rural life. For the former purpose two conditions are essential: Provision for specialized training and provision for scientific instruction and research. Both conditions are fully supplied in France; the first, by the regional schools of agriculture, which rank with the secondary schools of commerce and of arts and trades; the second, by the university laboratories and experimental stations. It is admitted that the teaching of agriculture in the elementary schools has proved of little advantage. The general inspector of the branch, M. Leblanc, complains that the lesson is too often a mere memoriter repetition of principles and rules; occasionally a teacher is found who turns the plot of ground belonging to the school or to the teacher's house into a garden for practical instruction and experimentation. Various causes are assigned for this unsatisfactory condition, such as the crowded programs and the brief period of school life, evils which can only be overcome by prolonging the ordinary period of school attendance. The law of January 11, 1910, raised the minimum age at which pupils may enter the examination for the certificate of primary studies from 11 to 12 years, and a bill is pending which provides for compulsory attendance upon continuation classes. A complete revision of the practical studies in the elementary program would be possible should this bill become law.

MOVEMENT FOR POPULAR ENLIGHTENMENT.

It is noticeable, however, that the great movement for the uplift of rural life in France is not directed to the work of elementary schools, but toward provision for the instruction, enlightenment, and social improvement of the adult population. Under the name of *œuvres post scolaire* this movement has assumed large proportions and definite direction throughout France. University professors and elementary teachers are united in the work which is fostered by Government and communal appropriations as well as by private subscriptions. Courses of instruction, illustrated lectures, dramatic representations, social reunions, and circulating libraries are all brought to the service of the cause. The Government agency for this work, the Musée pédagogique, in 1910 distributed 31,679 series of slides for the illustration of popular lectures, scientific, historic, etc. The same year the experiment of circulating libraries was attempted in seven cantons comprised in three departments. The number of volumes loaned was 3,000, and these were distributed mainly by the agency of teachers who volunteered for the work. In fact, the school is the center of the effort in every commune or dis-

trict, and the school teacher, who knows every family in the district, its indispensable agent.

The movement for popular enlightenment in France is carried on alike in cities and in rural communities, and by its universality helps to break down distinctions between the two and to create a sense of national unity and common civic interests. At the same time care is taken to adapt the lectures, the lessons, and the books selected for circulation to those distinctive conditions that grow out of the prevailing industry. This is especially noticeable in the choice of subjects for scientific lectures and in the courses of instruction planned for regular continuation classes; it is in these divisions of the work that the cooperation of the professors of secondary schools (the local colleges and the State lycées) is most valuable. Through the efforts of these professors, all of whom are university graduates, the latest discoveries and the best scientific knowledge bearing upon agricultural processes are brought to the attention of small holders and farm agents, and thus an interest is awakened in the improvement of agriculture, as well as in the economic importance of the industry. The effect is seen in the increased attendance upon schools of agriculture and the growing tendency to appropriate local funds for the maintenance of laboratories and experiment stations as adjuncts of the provincial universities.

Thus, France is reaching a fundamental principle of rural development. It involves all the elements of community life—intellectual, industrial, and social—and in this movement the elementary school is important, not because of the meager knowledge that can be acquired there, but as a center of parental hopes and community interests.

CHAPTER XI.

TRAINING OF VOCATIONAL TEACHERS IN GERMANY.

By Edwin G. Cooley.

INTRODUCTION.

This article describes the training given to teachers of German vocational schools of middle and lower rank, including the continuation schools and the various special trade schools, the building and machine trades, the industrial arts, the commercial schools, and vocational schools for women. No mention is made of the training of teachers for the highest class of vocational schools, as there is no proposal for the training of such teachers. Selection in these cases is made directly on the basis of scholarship and personality, qualities that are invaluable in all grades of teachers. When, however, schools and teachers become numerous, teachers must be employed who are not to the manner born; who are not especially distinguished by profound scholarship or strong personality, but who must be trained.

In the beginning of any movement for a new class of schools trained teachers are lacking, and positions in such schools are quite commonly filled by persons with more enthusiasm than knowledge of the business, as well as by inefficient persons from other occupations who seek an asylum in the public-school service. In Germany, as in other countries beginning to install vocational schools, the instructors have been largely part-time teachers from other schools, or from industrial vocations, to whom the vocational teaching has been a side issue. This is almost invariably the case in America, where our evening schools are taught either by elementary and secondary day-school teachers or by persons struggling to gain professional standing in some other field. In some cities, as in Chicago, would-be lawyers, doctors, etc., are no longer eligible to positions, but these positions are reserved for trained teachers. This, however, is only the first step. These professional teachers should be technically trained as well for the vocations followed by their pupils and employed for full time in the continuation-school work. Under no other condition can we secure the esprit de corps so necessary to the complete success of a system of schools.

In Germany great emphasis is laid, and in my opinion rightly, on what they call "corporate [or school] spirit"—the feeling that one's school is an independent and important organism, worth while for its own sake, and not merely an appendage to something else. Accordingly there is now a general movement toward organizing vocational schools on an independent basis with their own corps of teachers, their own special school buildings, and, finally, their own arrangements for training teachers for this class of work.

The standard for such teachers is constantly rising in Germany, and at the present time the teaching of vocational subjects there has been elevated to the dignity of a profession, demanding thorough preparation, general and special. The situation is different in different parts of Germany, the south German States being distinctly in advance of their northern neighbors. Everywhere, however, it will be found that people are discussing the question of securing better trained and more efficient teachers for the vocational schools.

VOCATIONAL SCHOOLS IN PRUSSIA.

The vocational schools, except the technical high schools, in Prussia are under the management of the Ministry of Commerce and Industry. For a number of years the Prussian authorities have been struggling with the question of training vocational teachers for the continuation and middle schools. The measures they have taken, with the exception of those for training teachers for women's work, seem to me fragmentary and insufficient. They are interesting, however, to Americans who are just beginning to think about the problem, and may furnish helpful suggestions as to first ways of meeting emergencies. The fundamental need in Prussia was to induce persons to accept teaching positions who were trained in the theory of their subjects and familiar also with the practical side of industrial life. In the first instance such persons were very rare, and it became necessary to make provision for having teachers adequately prepared. The Government has endeavored to fix the standards for this preparation, as well as to provide for the internal management of training schools.

In 1885 only a few teachers in the vocational schools of Prussia could lay claim to a pension. Their average salary was very small, and their social position was inferior to that of teachers in other schools. The Prussian Government has endeavored to change this, and to-day not only are the salaries of the principals and teachers of the schools paid wholly by the State but the city vocational-school teachers are appointed for life, with the right to a pension for themselves as well as for their widows and orphans. Those teachers of the State vocational schools who have a university education receive also a dwelling or a cash compensation for rent. While the salaries

are smaller than those paid in America, they approximate those given in the best academic institutions of Prussia. The Prussian Government has also undertaken to award titles and official positions to teachers in vocational schools, especially to teachers of State institutions of this kind. The effect of these two regulations is to make it easier to induce a high class of persons to undertake the training necessary for successful service in the vocational schools.

The difficulty, however, in Prussia has been only partly overcome. The training of vocational teachers for girls' industrial schools seems to have advanced the most. The steady progress of the movement for the emancipation of women in Germany and the increasing difficulty of preparing them for self-support under modern social conditions have finally induced the Prussian Government to make systematic arrangements for the training of women for work. In January, 1907, it was decreed that a normal department should be established in connection with every school of domestic science subsidized by the State. The decree also prescribed the course of study in the department. A detailed account of this organization will be given later.

In the Prussian schools for the building trades and schools of mechanical engineering, no special arrangement for the preparation of teachers has been made so far. There is no institution in Prussia for training such teachers, and, as far as I know, no system of examinations to test whether applicants have the requisite knowledge and skill. It seems to be quite the fashion to employ in such schools graduates of higher technical institutes who have seen successful service in the industries and have an interest in teaching. Very few of the ordinary academic teachers are to be found in these schools, even as teachers of the academic subjects. In the effort to keep in touch with modern industrial conditions the school authorities have almost invariably selected practical men from the industries as teachers. As a further measure for securing this close relation with industrial life many of these men have been encouraged to devote a part of their time to work in the industries. This is in striking contrast to the regulations of many school boards in America, which penalize any teacher who endeavors to engage in practical work outside of the schoolroom.

It must not be assumed that the Prussian authorities utterly neglect the matter of industrial training for this class of teachers. As already stated, such teachers are required to have an advanced education obtained in the university and the technical school, and especially to have had adequate experience in industrial life. Additional opportunities are given for the professional education of such teachers by means of visits to other cities, leaves of absence (with pay) for further study, and permission to engage in private occupations along the general lines of their teaching activities. The younger teachers

are also encouraged to employ their summer vacations in further special preparation.

The Prussian Government is especially concerned about the training of teachers for the industrial art schools. Such teachers must keep in touch with the progress of art; for example, by becoming familiar with new fields of activity in industrial design. Courses of instruction have been arranged for teachers in different fields of industrial art during the last few years. As for instance, the courses given by Architect Riermerschmidt, of Munich, dealing with designs for furniture and interior architecture; courses in flat ornamentation at the Industrial Art and Trade School of Magdeburg; in lettering in the school of design at Dusseldorf under Prof. Behrens; in mural painting and decorating for teachers of technical schools under the direction of Prof. Mohrbutter, at Charlottenburg; and finally a course in mural decoration under Prof. Hammel, at Hanover. Mention may also be made of courses in plant designs in 1901–2 and in 1909, conducted by Prof. Meurer at Rome and Berlin, which were attended by 50 Prussian teachers and directors. Such teachers are assisted by grants given by the State or municipality for teachers' study journeys. Similar journeys are encouraged by grants to teachers of the textile branches.

TRAINING FOR TEACHERS OF CONTINUATION SCHOOLS.

The professional preparation of teachers for continuation schools is more urgent and more important than for schools of any other class. In earlier times these schools were generally intrusted to teachers of elementary schools, who were seldom sufficiently prepared to give the proper instruction. It has been found necessary to give special training to all teachers employed in the continuation schools, and very thorough training to those employed to teach drawing and technology. When the whole continuation school system of Prussia was transferred to the Ministry of Commerce and Industry 25 years ago, efforts were at once made to provide for the training of teachers for continuation schools. During the years from 1886 to 1894 professional drawing courses were given at Berlin, Dusseldorf, and Hannover, where the sum of $2,284 was set aside annually for these courses. About 400 teachers had the benefit of the training. In consequence of the steadily increasing number of continuation schools, the number of courses in drawing increased; and courses in commercial subjects, language, and arithmetic were added. In 1905 the sum applied to this purpose amounted to $30,940, and in 1909 to $47,600. The number of teachers employed in the continuation schools in 1904 was 11,517, of whom 549 were employed in day continuation schools and, therefore, were compelled to sever their connection with the elementary schools. The number of such day

continuation schools is rapidly increasing, and with it the necessity of making larger provision for the preparation of teachers for this work. The Prussian Government recognizes this necessity fully and also the scope of the preparation which should include both pedagogical and technical training, completed by industrial experience, but the Government is still struggling with the problem, and, so far as the writer can see, has not worked out a thorough system for meeting the demands of the present-day vocational or continuation school.

TRAINING OF VOCATIONAL TEACHERS FOR GIRLS' SCHOOLS.

As has been pointed out, this class of vocational schools is in better condition, so far as the training of teachers is concerned, than the other vocational schools of Prussia. Since 1907 the Government has endeavored to deal directly and adequately with the problem. In this connection the following details are of interest:

There are three groups of teachers for vocational work for women in Prussia: (1) Teachers of women's handiwork; (2) teachers of household arts; (3) vocational teachers for the industries. Careful provision is made for training teachers of each of these classes. Teachers of the first group are specially prepared for the work of teaching children in elementary, middle, and higher schools to do some handiwork, such as knitting, crocheting, sewing, and embroidery. Teachers of the second group are trained to give instruction in school kitchens of the elementary schools where cooking and ordinary housework are taught. Teachers of the third class are prepared to teach older girls in the special continuation schools the finer handiwork required in tailoring, dressmaking, and millinery. It has been usual, but not universal, for the vocational teacher of the industry to qualify first as a teacher of women's handiwork and household arts and then build upon this for the higher position of a teacher of an industry.

At first vocational teachers were trained in private schools. Since 1890 three State schools for girls have been founded, one at Posen, one at Rheydt, and a third at Potsdam. One of the main purposes of these State schools is the preparation of women teachers of vocational work. These teachers are required to have a thorough training in several special subjects, based upon the general education given in a fully developed higher girls' school or girls' middle school of Prussia or equivalent education. After this comes the mastery of the technique of women's handiwork in special vocational schools. The course of study for the teachers of women's handiwork is a good preparation for the training of teachers for schools of special industries. Such teachers in the future must have a year's practice in handiwork and household arts as a preliminary in order that they

may not be inferior in their technical knowledge and dexterity to the ordinary teacher of these branches.

The decree for the training of industrial teachers issued in January, 1907, provides that industrial teachers must not only attend an institution for the training of such teachers, but must also serve at least a half year in actual industrial life and a probationary year in teaching before receiving the certificate of an industrial teacher. The knowledge provided by the theoretical training is not considered sufficient. This must be supplemented by practical application of the theory in the industries themselves, which no school training can replace. Finally, the training in methods of instruction can be successfully pursued only when a candidate is both trained in theory and has had experience in the industry itself. To sum up, the entire training consists of three stages: Theoretical instruction in the training school, practical experience in the industry, and probationary teaching.

The Government permits the experience in the industries to be gained either before or after attendance at the training school. On the contrary, the probationary year must follow the instruction in the school, and in no case can the probationary year be used for ordinary teaching; it must be reserved for the vocational training of the young teacher. For this reason only a small number of probationary students are sent to any one school.

Several different kinds of certificates are given to teachers, depending upon the specialty they select. As has been stated, an industrial teacher is qualified to teach a class in handiwork or in household arts. A teacher of millinery must be able to give instruction in other vocational subjects. In order to accustom themselves to the various types and sizes of schools, every teacher must be able to handle more than one vocational subject.

The ministry exercises great care in the admission to the training school of candidates from middle schools. Only schools of equal grade with the higher-grade schools are accepted.

The policy of basing the training of industrial teachers upon the training of teachers of handiwork and household arts has given rise to many questions. There is some doubt as to whether such candidates should be required to pass the examination of teacher of handiwork and household arts before entering upon the advanced courses. It seemed to many that the time taken in preparation for such examinations could be better employed for further training. On the other hand, some girls might be able to pass the first examination who would fail in the second and would therefore be required to give up study before the completion of their training. If they had passed the first examination, all would not be lost, as they could teach handiwork and household arts in the elementary or higher girls' school.

The interests of the girls themselves then seemed to demand that they be required to take the first examination before entering upon the advanced courses.

Admission into the seminary (or training school) for industrial teachers requires not only the passing of an examination as teacher of household arts and women's handiwork, but also that preparation be made in a women's institute, approved by the Ministry of Commerce and Industry. The school conducted by the Lette Verein is permitted to prepare teachers for everything except drawing. The Pestalozzi-Froebel House trains teachers for cooking and household arts. The Victoria School in Berlin trains teachers for dressmaking and millinery.

The three State institutions at Posen, Rheydt, and Potsdam all undertake the training of teachers for women's vocational work. Each of these three schools has four divisions: A school of household arts, an industrial school, a commercial school, and a seminary for training teachers. Everyone is urged to take the course in household arts, which includes an outline of all that a good housekeeper must know. The students receive instruction in cleaning and other household tasks, cooking, baking, sewing, mending, science of nourishment, care of children, and care of the sick. Special optional courses are given, such as courses for continuation school work and simple handiwork, dressmaking, sewing, millinery, drawing and painting, cooking, baking, washing and ironing. It is proposed to add also a training course in kindergarten work.

The hour plan for the various teachers' courses in these State schools follows:

Course of study for training teachers of handiwork.

Subjects of instruction.	Weekly number of hours.		Entire number of hours.
	First half year.	Second half year.	
Handiwork	9	12	420
Machine sewing, cutting and preparing linen articles of clothing	8	6	280
Study of materials	1	1	40
Drawing	4	2	120
Pedagogy	2	1	60
Practice teaching and method	2	5	140
Hygiene	1	1	40
German and civics	2	2	80
Arithmetic	1		20
Singing and gymnastics	4	4	160
Total	34	34	1,360

Course of study for training teachers of household arts.

Subjects of instruction.	Weekly number of hours.		Entire number of hours.
	First half year.	Second half year.	
Cooking	10	10	400
Handiwork	3		180
Housework, including washing and ironing	6	3	60
Natural science, including instruction about food	3	3	120
Domestic economy, keeping of household accounts		1	20
Pedagogy	2	1	60
Practice teaching and method		7	140
Hygiene	1	1	40
German and civics	2	2	80
Arithmetic	1		20
Drawing	2	2	80
Singing and gymnastics	4	4	160
Total	34	34	1,360

Course of study for training teachers of cooking and household arts.

Subjects of instruction.	Weekly number of hours.		Entire number of hours.
	First half year.	Second half year.	
Cooking	12	12	480
Housework	6		120
Washing and ironing		6	120
Machine sewing	3		60
Natural science, including foods	2	2	80
Keeping of household accounts	1	1	40
Pedagogy	2	2	80
Practice teaching	1	5	120
Civics and political economy	1		20
Drawing	2	2	80
Singing and gymnastics	4	4	160
Total	34	34	1,360

Course of study for training teachers of handiwork and machine sewing.

Subjects of instruction.	Weekly number of hours.		Entire number of hours.
	First half year.	Second half year.	
Handiwork and machine embroidery	14	12	520
Machine sewing	5	5	200
Science of machine sewing	1		20
Study of materials	1	1	40
Study of style	1	1	40
Technical drawing	4	4	160
Pedagogy	2	2	80
Practice teaching	1	5	120
Civics and political economy	1		20
Singing and gymnastics	4	4	160
Total	34	34	1,360

Course of study for training teachers of dressmaking.

Subjects of instruction.	Weekly number of hours.		Entire number of hours.
	First half year.	Second half year.	
Making dresses	21	19	800
Art of machine sewing	1	.....	20
Study of materials	1	1	40
Technical drawing	3	3	120
Pedagogy	2	2	80
Practice teaching	1	5	120
Civics and political economy	1	.....	20
Singing and gymnastics	4	4	160
Total	34	34	1,360

Course of study for training teachers of tailoring.

Subjects of instruction.	Weekly number of hours.		Entire number of hours.
	First half year.	Second half year.	
Tailoring	19	17	720
Art of machine sewing	1	.....	20
Study of materials	1	1	40
Technical drawing	4	4	160
Art of making suits	1	1	40
Pedagogy	2	2	80
Practice teaching	1	5	120
Civics and political economy	1	.....	20
Singing and gymnastics	4	4	160
Total	34	34	1,360

Course of study for training teachers of millinery.

Subjects of instruction.	Weekly number of hours.	Entire number of hours.
Millinery	18	360
Study of materials	2	40
Drawing	8	160
Study of costumes	2	40
Total	30	600

Course of study for training teachers of industrial art work.

Subjects of instruction.	Weekly number of hours.				Entire number of hours.
	First half year.	Second half year.	Third half year.	Fourth half year.	
Artistic handiwork	14	16	14	10	1,080
Art of machine sewing	1	.....	.....	.....	20
Study of materials	1	1	.....	.....	40
History of the textile art	.....	.....	2	2	80
Study of style	1	1	1	1	80
Drawing	12	12	10	10	880
Pedagogy	.....	.....	2	2	80
Practice teaching	.....	.....	1	5	120
Civics and political economy	1	.....	.....	.....	20
Singing and gymnastics	4	4	4	4	320
Total	34	34	34	34	2,720

The Prussian plan of preparing vocational teachers is followed in most parts of Germany, academic teachers and men trained for the industries being employed in varying proportions with more or less special preparation for their vocational teaching. Nothing, however, that can be called a system exists in Prussia, or anywhere else in Germany outside of Munich, Wurttemberg, and Baden. Classes may be found suffering from instruction by a teacher who does not know the industries he attempts to teach, and others becoming demoralized under a mechanic who can not teach or govern.

MUNICH PLAN.

At the annual conference of the Association of Teachers in Technical Institutions of Great Britain held in Southport, 1911, Thomas J. Bernett, M. A., master of method for the Edinburgh School Board, discussed the question of training of teachers for the continuation schools. In his address he gave a translation of a communication he had received from Dr. Georg Kerchensteiner, director of education of Munich. In this communication Dr. Kerchensteiner says:

> The training of trade teachers in Germany goes on, properly speaking, in only two towns, Karlsruhe and Munich. In the rest of Germany trade teachers are mainly chosen from the certified students of the different technical day schools. Vienna has an excellent school for trade teachers in its Technological Industrial Museum.
>
> In regard to Munich in particular, the town in which trade teachers are more employed in continuation schools than in all Germany and Austria, we train our trade teachers ourselves. Every year, when need arises, we issue a notice that first-class men engaged in trade are wanted for the different branches of woodwork and metal work. As soon as applications have been received, we decide whether the candidates are to be admitted to the examination. The examination includes the execution of a piece of practical work, the drawing of the plans of that work, an estimate of the expense entailed, and a written description of the steps involved. If the examination is passed, the candidates must next practice for six months, without pay, in the workshops for instruction provided for that purpose. In the second half year he must continue his practice, but receives a wage of 75 cents per day. In the meantime he has also to complete his training by attending a course of lectures on the theory of education, on technology, on tool-and-machine construction. After the course of a year he has another examination to pass, which includes the same subjects as the first examination, and in addition the lectures heard in the course of the year. Besides, he has to stand a test of his teaching powers before a class of pupils. If this examination is passed, he is appointed trade teacher at a salary of about $535. It may be added that excellent candidates come from the metal and timber industries.
>
> As trade teachers for other different trades we choose direct from the workshop men who can show very good testimonials, and we watch whether they are successful in teaching. At first they get but a few lessons to teach at so much per lesson; if they prove themselves they get more and more, and if they do very well, are then finally placed in a responsible position. This policy has throughout proved successful.

In Wurttemberg and Baden the Governments have grappled with the problem and have evolved a method of training vocational teachers that can claim to be systematic and thorough. I begin with an account of the organization of the Wurttemberg system.

WURTTEMBERG PLAN.

Wurttemberg has had vocational schools of both high, middle, and lower rank for many years. The lower schools were reorganized by the law of July, 1906, which provides for—

(1) Placing the entire organization of such schools on a vocational basis; (2) special support of these schools independent of the general system; (3) compulsory attendance between the ages of 14 and 18; (4) time and duration of instruction given to apprentices; (5) training of teachers and inspection of these schools; (6) obligations of employers with reference to these schools; (7) discipline and regular attendance; (8) an industrial school council to manage them.

In the vocational schools the vocation dominates not only the course of study, but also the entire organization and administration, including the special training of the teachers. The law prescribes three successive years of instruction in continuation schools for apprentices between the ages of 14 and 18, paralleling the years of apprenticeship. Within these limits the school is to be organized in the way that seems best adapted to secure training for the vocation.

The vocational school works under difficulties, greater comparatively than those of the elementary school. The pupils of the elementary school are all prepared in the same general way, and advance through successive grades without a break. In the vocational school the pupils are not all trained in the same way nor to the same degree, many of them having left the elementary school after finishing the fifth, sixth, or seventh grade, and 80 per cent of them before completing the entire eight grades. The vocational school must, therefore, build upon the somewhat narrow basis of experience, must deepen and widen this experience, and develop a habit of thought that will extend beyond immediate observation, and aim at the understanding of both the "how" and "why" of the practice in the vocation. The teacher is compelled to give up the ordinary notion of progress through the various subjects, and must constantly repeat his instruction in the essentials with an ever wider application to the experience gained in vocational life. In other words he must employ what used to be called in America "the spiral method."

In the vocational school, correlation of subjects is especially important. The subjects of instruction must grow out of each other. Industrial work and a certain amount of commercial work must be taken together. Technical instruction must be given in the closest connection with everything else in the course. All the work of the school is related to the vocation and tested by its usefulness in the vocation. In most cases this close correlation among all the subjects given in the school can be best secured by having teachers each of whom can teach all the compulsory subjects of the general division

to which he is assigned. Four divisions are recognized in the Wurttemberg plan: The machine trades division, the building trades division, the industrial arts division, and the commercial division. Every teacher must be prepared to teach all the subjects included in one of these divisions. Such an arrangement is inevitable in all but the largest places, but in any event is best suited to securing the correlation of subjects necessary in a vocational school. The organization for the large places only might be different, but there are advantages in having all of the vocational schools organized on one general plan. The vocational teacher must therefore possess a wide and extended training in technology, commerce, industrial art, and pedagogy. Such teachers, engaged all the time in their own divisions, can do more to build up an esprit de corps than any number of teachers of special subjects.

The effort to secure teachers by the ordinary methods of advertising and examination has failed. Teachers must be trained for this special task. Now, the two classes of persons who can be trained are the experienced academic teacher and the trained technical man from the industries. Of the two, the academic teacher lacks technical and business knowledge and must be trained technically and commercially; the technical man has technical knowledge, but must gain power of control and skill in presentation. Every well-organized school should have representatives of both classes. Only those who have mastered one of the vocational groups technically, commercially, and pedagogically are permitted to teach in a vocational school in Wurttemberg.

Briefly then, the work of the vocational schools may be divided into four groups: (1) The machine trades group, (2) the building trades group, (3) the industrial arts group, (4) the commercial group. The Wurttemberg plan provides for the training of technical teachers, thoroughly equipped in some one of the four main groups and in the rudiments of business theory and methods of instruction. The employment of teachers whose technical knowledge is limited to one of these groups, or a part of it would be possible only in the largest schools, and their employment even there would be bad for the school system.

In small places, where perhaps only a single vocational teacher is employed, that one should be thoroughly trained in the leading industry of the locality; and he must know in addition the rudiments of other trades or vocations if he is to perform his function fully. In larger places some division of labor among the teachers is possible. In Feunbach, a suburb of Stuttgart, with about 13,000 inhabitants, the writer visited a vocational day school with two divisions, one for the building trades group and one for the machine trades group. One of the teachers had been trained in the building trades school at

Karlsruhe and one in the machine trades courses at Stuttgart, described later in this article. In still larger places visited, the division of labor among the teachers was carried much further. In one instance a teacher was caring for a division consisting of printer's apprentives only. In each case the division of labor did not extend within the main group of subjects, but one teacher was required to care for his entire division, and often was promoted with it at the end of the year. Part-time teachers were employed usually to teach the optional subjects only, full-time teachers caring for the compulsory ones. Such teachers of optional subjects are not included in the general scheme for training teachers, but take short special courses of from two to six weeks' duration.

The full-time vocational teachers of Wurttemberg are trained in extended courses maintained in special schools for training teachers of this class of work. The teachers who specialize in the building trades are now sent to Karlsruhe in Baden, the best school for vocational teachers in Germany. Here they take a course of three and one-half years. The students in this course are drawn from the class of experienced and efficient elementary and secondary teachers, who have already had the pedagogical training of the teacher's training school. They have been through at least six years of a secondary school before going to the training school, so that they are well grounded in ordinary cultural subjects. Wurttemberg grants them an allowance of $240 per year while they are at Karlsruhe. After finishing the course there, they are required to spend from six months to a year in actual shop practice in the industries. In 1907 there were some 40 or 50 candidates from Wurttemberg in the Karlsruhe training school; the course of this school will be described in the discussion of the subject for Baden.

The teachers for the commercial continuation schools of Wurttemberg are sent to commercial high schools where special courses for training such teachers are provided. Leipzig, Mannheim, Cologne, Berlin, and other cities have similar courses, the one at Leipzig being especially good for this purpose. Besides this, preparatory courses of one and one-half years' duration were established in Stuttgart in 1907. Candidates for such courses are selected from elementary and secondary teachers of exceptional ability.

Similar provisions are made for candidates for positions in the industrial arts group of trades, who are usually sent for their training to an industrial arts school, such as the one at Stuttgart or at Munich.

The selection of so many elementary teachers for these courses is, for the most part, based on reasons of expediency. Skilled technical and business men are equally desirable, but harder to get. In fact, most authorities regard them as better material for teachers of voca-

tions. It is, however, difficult to attract efficient architects and engineers to the teaching profession, while it is dangerous, as we know in America, to employ men from the industries who have been misfits in a profession and who seek an asylum in the industrial school service. Wurttemberg is, however, finding it necessary to train some men from the industries for its service, and has organized special courses for the purpose.

Candidates admitted to the courses must have had the training of an industrial school of middle or higher rank and successful experience in their profession, but for the special course they receive no scholarship allowance, as many are likely to fail to meet the demands of the new profession.

On account of the demand for vocational teachers it has been urged that such practical men be allowed to teach their own specialties without much preparatory training, at least in the larger cities, where it would be possible to find places for men who can teach only one subject. This proposition has been rejected for several reasons: It would prevent the formation of an institutional interest and pride in the vocational school, a general interest in training boys rather than in teaching subjects. It would destroy esprit de corps in the teaching force by filling the most important positions (those in the larger cities) with teachers of the least special preparation, and thus lead to indifference on the part of better-trained teachers whose opportunity for advancement would be cut off. Merit would cease to rule, and lack of training would bring special privileges. Wurttemberg preferred to wait, and frowned upon all attempts to organize industrial schools before properly trained teachers could be provided. The law of 1906 was, therefore, to be put into operation in 1909, after teachers had been trained, special buildings erected, and a complete organization perfected. This is not the American system, where in our haste to reach the end we are apt to overlook the means necessary for success. The requirements for students at the Karlsruhe training school have been adopted for the training courses for technical men at Stuttgart.

Mastery of the subject matter is not a sufficient preparation for teaching it. Highly trained technical men often fail when put before a class. While the Wurttemberg school takes all possible care to make sure that the teacher knows his subject, it also insists upon a training in theory and in the practice of classroom work. The teacher must be taught how to use his material, how to sift out essentials and treat them in a systematic way, and how to handle a class, secure attention, and preserve discipline.

The lecture method is not employed in these courses, except in a very few subjects, the seminary method being the favorite one. Observation of good teaching in vocational schools is one of the

features, and students make excursions to the best industrial schools of Baden to observe the work done there. Characteristic problems are worked out in the seminar and students are encouraged to attack similar problems themselves. The seminar attempts careful treatment of the subjects of the "question" and the "explanation."

The instruction is not, however, limited to mere matters of detail, but goes into the general theory of education, with a historical survey of its development and of its leading representatives. Special divisions of the general subject are given thorough treatment. The technical man is shown the interworking of social science and pedagogy and the necessity of a knowledge of methods of instruction. He is made to feel the responsibility of the teacher and encouraged to make a wider research into the educational questions of the time.

The course for such technical men is shown by the following general requirements and programs:

1. The course is one and a quarter years in length, of which one year is devoted to the study of pedgogical questions and three months to a review before the service examination. Those who pass the examination are immediately assigned to temporary work in the schools.

2. The number of participants in each course is 20. This allows for the dropping out of some before the end of the course.

There was at first some disposition to lighten these requirements in view of the great demand for vocational teachers. The authorities, keeping in mind the importance of the function these teachers performed, decided not to place the minimum too low. The vocational teachers must form a contingent of the public service equal in rank to the general body of officials if these schools are not to lose the confidence of the people. This is important in view of the prominent position accorded to the German teacher. The vocational teacher must be the equal of the academic teacher in culture, salary, and professional ability if the vocational schools are to sustain themselves.

High demands as to general culture are made upon the vocational teacher. They teach business and cultural subjects as well as technology, and therefore must possess the general training indicated by the completion of the first six classes in a secondary school.

Along technical lines these technical men must have had training equivalent to that required of an architect for the State master builder's certificate, or, in the case of the mechanical engineer, to that required for the diploma examination. In the case of an industrial art teacher he must show the qualifications necessary for the drawing teacher's examination. Technical men who wish to become vocational teachers and who have passed none of these examinations must prove their technical qualifications by a preliminary examination.

The course requires 36 hours per week, which is less than the time required at Karlsruhe, where technical students spend an average of 45 hours a week and commercial students 28 hours a week. More can be exacted of the technical men than of the commercial students, because a large part of the time in the former courses is employed in drawing and in practice, which do not require so much work.

Course of study for vocational teachers in Wurttemberg.

Subjects of instruction.	Hours per week.	
	First semester.	Second semester.
1. Industrial arithmetic and calculations of cost	1	1
2. Business correspondence and business calculations	1	1
3. Geometry and plane trigonometry	2	
4. Physics (with mechanics and electricity)	2	2
5. Chemistry and theory of materials	2	2
6. Technology (teaching or working tools, machinery, and technique of work); a few especially important industries	1	1
7. Bookkeeping and theory of exchange	2	2
8. Theory of political economy	1	1
9. Legal principles	2	
10. Introduction to the industrial school practice	2	2
11. Pedagogy	1	1
12. Technical special instruction:		
A. Free-hand drawing	2	2
B. Theory of projection, theory of light and shade, perspective	2	2
C. Technical drawing and modeling—		
(*a*) For machine technical trades:		
Instrument and machine making	3	
Pattern making, wagon making, and smithing	2	
(*b*) For the architectural callings:		
Masonry	4	
Stone cutting	4	
Carpentry	4	
Glazing and joining		4
Locksmithing, plumbing, and installing		3
(*c*) For the industrial art trades:		
Sculpture		4
Painting		4
Harness making and decorating		2
13. Practice teaching		4
Total	38	33

It is apparent that the above course is planned for mechanical engineers who are preparing to become vocational teachers. For this reason, a comparatively short time is given to technical instruction in engineering, as it would offer nothing new for the candidate. If men from the building trades or industrial art trades enter these courses, the number of hours in 12 C *b* or *c* can be reduced in favor of more work in the mechanical engineering subjects. If the technical man is especially qualified in one division, he can give special attention to some other in his vocational course.

The management and supervision of the course is in the hands of the Royal Industrial Council. Teaching halls are opened in localities requiring a course of this sort. Such halls are well lighted, provided with the necessary equipment, and with drawing rooms and laboratories. As instruction in technique and drawing demands the use of material which exists only in special technical institutions, it is

expected that courses will be offered in the Royal Building Trades School of Stuttgart, and that the teachers of this institution will be avilable to conduct them.

As already stated, it has not seemed wise to make State grants to technical men carrying on studies to prepare for work as teachers in vocational schools. The situation is not the same as with the teachers studying in Karlsruhe. The Karlsruhe candidates are already in the State teaching service, and are on a leave of absence for advanced work. The State support is only a partial compensation for their loss of salary. These teachers have already proved their qualifications in work for the State, and it is reasonably sure that they will be successful in their new school work at Karlsruhe. They have already demonstrated their ability in the classroom. With the technical man the case is different. He is required to change his calling, and enter into a profession, not knowing whether he will "make good" or not. No one can guarantee that a State scholarship awarded to such persons will be a good investment. It seems, therefore, not to be wise to encourage such men to enter the profession by a money scholarship, except in the special case of unusually capable men who have already demonstrated their ability in the classroom of an ordinary continuation school.

TRAINING OF VOCATIONAL TEACHERS IN BADEN.

The Grand Duchy of Baden was one of the earliest European States to take up the systematic training of its youth for a vocation. The vocational schools are well organized and the teachers are exceptionally well trained for their work. Baden has had, since 1882, a well-organized school in the city of Karlsruhe for the training of vocational teachers. For this reason, a full statement of the requirements for such teachers in the Grand Duchy of Baden, together with a transcript of the program of work carried on in the school for the training of vocational teachers, may be of interest and value. I shall omit unimportant details.

TRAINING OF COMMERCIAL TEACHERS.

The ordinance of 1907 with reference to the training and examination of commercial teachers provides as follows:

An appointment as a commercial or industrial teacher depends upon passing an examination which is given every year by a committee of the National Industrial Commission. Admission to the examination depends upon proof of—

1. Citizenship of Baden. 2. Acceptance as a candidate for the position of teacher in the elementary schools or the completion of the seventh year of a secondary school. 3. A certain amount of experience in the mercantile business, as given below. 4. At least two years' attendance at an educational institution designated by the ministry of the interior for the training of commercial teachers.

Elementary school teachers must furnish evidence of practical service in a mercantile business of at least one year, and candidates who have finished the seventh year of a secondary school must spend two years in such service, all of which service must be completed before attendance at the school for training commercial teachers.

The examination is divided into a written and an oral part. It covers the following subjects:

(1) German composition; (2) German business correspondence; (3) commercial mathematics; (4) bookkeeping; (5) foreign languages; (6) stenography; (7) typewriting; (8) general economic geography; (9) political economy and science of finance; (10) legal principles; (11) history of commerce; (12) lectures on teaching and theory of method.

The requirements in these 12 subjects are as follows:

1. German composition: Written treatment of some subject lying within the circle of observation of the candidate.

2. German business correspondence: The ordinary commercial correspondence and counting-room work.

3. Commercial mathematics: Ordinary business arithmetic; equations of the first and second degree with one or more unknown quantities; logarithms; arithmetical and geometrical series; calculations of compound interest and stocks; theory of combination; binomial theorem; calculation of loans and insurance.

4. Bookkeeping: The most common system of bookkeeping for banks and manufacturing establishments, with accuracy in preparing final statements.

5. Foreign languages: English or French (according to choice of candidate). Knowledge of grammar, phonetically trained expression, facility in oral use, oral translation into German of letters and essays written in foreign languages, and written preparation of a translation of German matter relating to commercial affairs into the foreign language.

6. Stenography: Mastery of the system of Gabelsburger or Stolze-Schrey; writing of at least 150 syllables per minute.

7. Speedy writing on a typewriting machine.

8. General economic geography: Thorough economic geography of Germany, with reference to the most important branches of industry; the ways and means of commerce; production, peculiarities, and uses of the most important articles of commerce.

9. Political economy and science of finance: (*a*) Fundamental conceptions of political economy, with special attention to money, coinage, banks, markets, and joint-stock affairs; commerce and trade politics, the labor question, insurance, the historical development of special economical movements or tendencies; (*b*) characteristics of the science of finance in relation to tariff and taxes; community and State finances.

10. Legal principles: Commercial law, laws of exchange, and maritime law, as well as the provisions of the civil code most important for the merchant; civil processes and trade regulations; patent rights; trade-marks; bankruptcy law; outline of constitutional, administrative, and international law.

11. History of commerce: Outline of the history of commerce in ancient times and in the middle ages, with a thorough study of the history of commerce in modern times, especially since 1900.

12. Courses on teaching and theory of method: Skill and ability in handling a given problem in school instruction; knowledge of the course of study of commercial schools and the treatment of the special subjects of instruction.

Every candidate is permitted to undertake an examination in one or more modern languages (English, French, Spanish, or Italian, in addition to the one already chosen by him). This further examination may be taken after the candidate passes the examination as a commercial teacher.

A candidate who fails may repeat the examination after the expiration of a year; if he does not pass at the second trial he will not be permitted to try again.

The fee for the examination is 20 marks, and for the further examination on special languages, 5 marks. Upon request the fee of persons without means may be wholly or partly remitted.

The ordinance contains an emergency clause to the effect that so long as Baden does not have a sufficient number of teachers at its disposal measuring up to these requirements persons may be employed as commercial teachers who have gained the necessary knowledge in other ways and have proven their fitness by instruction in a commercial school.

TRAINING OF INDUSTRIAL TEACHERS.

The ordinance concerning the preparation and examination of teachers for industrial schools is as follows:

Applicants for appointment as teachers in industrial schools must pass a special examination. This is divided into a preliminary examination and a principal examination. The examination is held every year under the direction of a committee of the National Industrial Commission. Admission to the preliminary examination depends upon the proof of (1) citizenship of Baden; (2) acceptance as a candidate for the position of teacher in the elementary school or the completion of the seventh year of a secondary school; (3) attendance in the first three classes in the industrial teachers' division of the Building Trades School of Karlsruhe.

To be admitted to the principal examination, candidates must have passed the introductory examination, must have attended from the fourth to the seventh class in the industrial teachers' division of the Building Trades School in Karlsruhe, and must bring proof of the prescribed practical experience in industrial life. This practical experience must amount in the case of elementary teachers to at least one year and in case of candidates who have finished the seventh class of a middle school to at least two years. It must be finished before the candidate enters upon the fourth class in the industrial teachers' division of the Building Trades School in Karlsruhe. The time spent in industrial operations, or in vacation work for the Building Trades School, will not be reckoned in this practical experience. A more detailed account of the nature of the practical work will be given later.

The examination is divided into an oral and a written part. In the preliminary examination there is also a test of the teaching ability of the candidate.

The preliminary examination covers the following subjects: (1) German composition; (2) mathematics; (3) descriptive geometry; (4) physics; (5) chemistry; (6) elements of mechanics; (7) free-hand drawing and painting.

The principal examination includes the following:

I. For the building trades department: (1) Theory and design of building construction in stone, wood, and iron; (2) elements of the theory of mechanics.

II. For the machine trades department: (1) Theory of mechanics; (2) elements of electrotechnology; (3) elements of the theory of building construction.

III. For both architectural and machine trades department: (1) Grammar of form and elements of the history and technique of industrial art; (2) science of materials and mechanical technology; (3) applied drawing and painting; (4) modeling; (5) political economy and legal knowledge; (6) bookkeeping and calculations of cost; (7) courses on teaching and theory of method

The following are the requirements in the individual subjects of examination:

PRELIMINARY EXAMINATION.

1. German composition: Written treatment of a theme within the circle of observation of the candidate.

2. Mathematics: General arithmetic; industrial and business calculations; equations of the first and second degree with one or more unknown quantities; logarithms; arithmetical and geometrical series; calculations of compound interest and stocks; theory of combinations; binomial theorem; elementary theory of maxima and minima; plane geometry; solid geometry; plane trigonometry; selected chapters from the elements of analytical plane geometry.

3. Descriptive geometry; straight lines and planes in space; curved and warped surfaces; penetration of curved surfaces by planes (conic sections); penetrations of opposite curved surfaces; tangents and tangent surfaces; determination of the true size of projected surfaces and plane figures; development of curved surfaces; development of irregular surfaces; application of descriptive geometry to important practical examples; theory of light and shade; perspective.

4. Physics: Knowledge of physical phenomena and laws, with simple proofs, especially of the theory of light, heat, magnetism, and electricity; knowledge of physical apparatus, and practice in the use of apparatus commonly employed in school instruction.

5. Chemistry: Knowledge of the fundamental conceptions of chemistry, and of the appearance and peculiarities of the most important elements and their combinations in the fields of organic and inorganic chemistry so far as they are of special importance for the industries; the most important points in chemical technology; practice in experimentation.

6. Elements of mechanics: Theory of specific gravity and of the movements of solid, liquid, and gaseous bodies; the simple machines; graphic statics; strength of materials; application to simple construction in the fields of architecture and engineering.

7. Free-hand drawing and painting: Skill in the technique of the different kinds of drawing and painting; sketches of simple natural objects; elements of grammar of form.

PRINCIPAL EXAMINATION.

I. *For the architectural department:*

1. Theory and designs of building construction in stone, wood, and iron—
   (*a*) Knowledge of brickwork: Brickwork bonds, plans for chimneys, slating or shingling, openings in walls (windows, doors, and the like), construction of arches, plans for toilet rooms, steps in stone, wood, and iron, wood joints, positions of beams, partition walls, truss work and strut frames, roof construction.
   (*b*) Knowledge of inner architecture, especially of the work of the cabinetmaker, glazier, and locksmith.
   (*c*) Knowledge of simple construction in iron, e. g. of columns and ceilings.
   (*d*) Working out of problems and sketches pertaining to parts of buildings of stone, wood, and iron.
2. Elements of the theory of machinery—
   (*a*) Description of the elements of machines and of simple kinds of machines.
   (*b*) Reproduction of parts of a machine in sketches and upon this basis a complete drawing of the same.
   (*c*) Treatment of simple problems in the field of engineering.

II. *In the technical engineering department:*

1. Theory of mechanics: Calculations and construction of the elementary machines, including the crank, transmission, pump, lifting apparatus, steam boiler, steam engine, and hydraulic motor; knowledge of gas motors and of machine tools; calculation of gearing, velocity, etc.
2. Elements of electrotechnology: General principles; calculation of simple transmission for house installation; the best known applications of the electrical current; knowledge of simple electrical machines for direct currents and their methods of operation.
3. Elements of architecture—
   (*a*) Knowledge of simple building construction.
   (*b*) Treatment of simple problems in the field of architecture in stone, wood, and iron.

III. *For both architectural and mechanical departments:*

1. Geometry and elements of the history of artistic handwork and of the technique of industrial art—
   Sketches of stone, wood, and metal forms.
   Historical survey of the development of industrial art and of the most essential technique.
2. Theory of materials and mechanical technology: The most important materials met in the industries, their peculiarities, uses, and treatment. The most important tools and machine tools.
3. Applied drawing and painting: Sketches of simple decorative forms, with and without application of color.

IV. *Modeling:*

Modeling of simple ornaments according to a given drawing.

V. *Political economy and legal knowledge:*

The most important points in political economy with special regard to the industrial needs and the existing organization of the industries and the social institutions of Baden; the constitution of the Empire and of Baden; the State and community governments; the most important provisions of the civil code and of the laws of commerce and exchange; organization of justice and judicial procedure; the most important trade regulations, especially the organization of handicrafts and the protection of workingmen; workingmen's insurance; nature of associations; the building ordinances of Baden; the elements of the tax legislation of the Empire and of the Grand Duchy of Baden.

VI. *Bookkeeping and calculations of cost:*

Elements of double-entry bookkeeping, of calculations of cost, and of the theory of accounts current.

VII. *Courses on teaching and theory of method:*

How to treat a given problem in school instruction; knowledge of the course of study in the industrial schools; discussion of special subjects of instruction.

A candidate who fails may repeat the examination after the expiration of a year. If he fails a second time he can not try again.

The fee for examination is 20 marks. Upon application this may be partly or wholly remitted for persons without means.

The authorities of Baden lay down explicit rules concerning the nature and extent of the practical industrial work to be done before entrance into the fourth class of the department of industrial teachers in the Building Trades School of Karlsruhe.

A. Persons who intend to devote themselves to the calling of an industrial teacher and who have been accepted as candidates for the

elementary schools must take the following course of work in the industry:

	Months.
Masonry	2
Carpentry	1
Building and artistic iron work	1
Joining and furniture making	1½
Tinsmithing	1½
Whitewashing and decorating	1½
Mechanical engineering	1½
Optional work	2
Total	12

B. For those who enter from the seventh class of a middle school the work is as follows:

	Months.
Masonry	4
Carpentry	2
Building and artistic iron work	2
Joiners and cabinet making	3
Tinsmithing	2
Whitewashing and decorating	2
Mechanical engineering	2½
Work in the graphic industries	1½
Optional work	5
Total	24

It is recommended that voluntary work be done in one of the following trades: Stonecutting, glazing, plumbing, paper hanging, electrowork, lithographing, bookbinding. It is not expected that candidates will acquire great mechanical dexterity by means of this practical activity in industrial life, but it is hoped that a clear and comprehensive survey of the whole industrial field can be made, and attention be paid to the different processes of work. During the time of practical work in the industry, which is included in the preparation for the profession of industrial teacher, it is especially important that the candidates comply exactly with the same methods of business and times of work as the ordinary worker in the industry. At the close of this work the candidate must present a certificate from the manager of the business in which he has been engaged. In some cases State support will be granted to facilitate this training in the industries.

A certain amount of vacation employment is demanded of students in the Karlsruhe school, although this is not reckoned as practical experience in the industries. This vacation employment includes—

	Months.
Masonry	1½
Building and artistic iron work	1½
Joining and furniture making	1½

The director of the school prescribes the kind of drawing and practical work to be done during the vacation.

Those attending the industrial teachers' department of the Building Trades School of Karlsruhe are further required to attend all excursions prescribed by the director of the school to industrial plants of the neighborhood. When necessary some pecuniary assistance will be given to those employed during the vacations or taking part in the excursions. All students in the school are required to take part in the seminary practice. Each one in the department must prepare one or two tasks each semester and, after the expiration of the time given for working it out, must present it for approval.

THE KARLSRUHE BUILDING TRADES SCHOOL.

The following description of the Karlsruhe Building Trades School includes the general purpose of the institution and a detailed account of the work of the department for the training of industrial teachers:

The Karlsruhe Building Trades School was founded in the year 1878 as a State institution. Its purpose is to train men for the building, machine, and electrical trades, to prepare for the work of building and the factory, as well is to prepare artisans of middle rank to act as officials in the State and community. For this reason the instruction in theory must depend upon the practical needs of the industries.

The Building Trades School also undertakes the education of industrial teachers. Learning industrial handicraft depends upon the practice of the building operations and the workshop, and must, for all pupils, precede their admission into the institution. Accordingly the practical exercises which are carried on in a few classes in the institution are handled so as to lay the principal emphasis upon the theoretical development of the trade and upon the solution of difficult problems. The successive classes last one-half year each. They may, with few exceptions, be attended either in summer or winter, according to the personal convenience of the pupils.

AIM AND ORGANIZATION OF THE INSTITUTION.

The school consists of the following five divisions:

I. *The building trades division.*—This division has the task of training State master builders for the city and country, superintendents of buildings, draftsmen, and master workmen certificated by the State, as well as engineers of middle rank for the State and community offices. The instruction is imparted in six classes, each of one-half year's duration. The sixth class is attended mainly by those who wish to undertake the State master builder's examination, and is maintained only in winter.

II. *Road-building and hydraulic engineering division.*—The training of pupils in this division takes place in six successive classes of one-half year's duration each. This division aims, first, at training engineers in the road and hydraulic service as officials for both State and community, as well as for industrial undertakings. While those finishing this division of the school are admitted to the State master builder's examination, the under classes provide the necessary training for passing the road master's theoretical examination. The building superintendents and draftsmen, as well as the street and dike masters, find suitable opportunities for vocational education as soon as the introductory training and practice complies with the conditions of admission to the examination. The fifth class is carried on in summer; the sixth in winter only.

III. *The machine trades division.*—This division undertakes to train machine engineers for the State bureau of construction and for the workshop. The instruction is given in five classes, each of one-half year's duration. Those attending this division as a rule enter later into private industrial plants or the railway service, and eventually become railway engineers, foremen, or master workmen. Those finishing this course are qualified to take the State foreman's examination.

IV. *Electrical division.*—The training of students in this division also falls into five successive classes, each of one-half year's duration, and during the first three semesters the course is the same as that of the machine trades division. The purpose of this division is to train electrical engineers for the bureau of construction and for the workshop, as well as for conducting the business of smaller electrical establishments and individual plants. After finishing this division they go either into the production of electrotechnical products, or into the State or community offices or into private electrical business. This division also offers to young people the instruction necessary to enable them to establish themselves as independent workers in electrical installation. Those finishing this division are qualified to take the State foreman's or master builder's examination.

V. *Division for the training of industrial teachers.*—This division aims at preparing teachers to give the industrial and technical instruction prescribed by the laws of the country for the industrial schools, and is, of course, attended mainly by students who intend to devote themselves to the teaching profession. Candidates for positions as industrial teachers must attend the institution seven semesters, and then pass the regular State teacher's examination.

Candidates who seek admission into the lower classes of the first four divisions of the Karlsruhe Building Trades School must have finished their sixteenth year. At the time of admission candidates must pass an examination in German, arithmetic, and the theory of

projection. Besides this, previous practical experience in the industries is demanded under all circumsatnces for admission into the lowest classes of any one of the four divisions. This practical experience must amount to at least 2 full years (24 months), in which service in an office is not to be counted. The experience must be obtained as follows: (1) For the architectural division, in actual building operations; (2) for the road building and hydraulic division, in actual work of this class; (3) for the machine engineer, in the machine shop; (4) for the electrical division, also in the machine shop in the following proportions: Students with predominatingly machine-engineering training must take from the minimum requirements of 2 years' experience at least 9 months in an electro-technical manufactory, in electro-technical business, or in fitting up electrical plants; students who attend this division with predominatingly electro-technical experience must complete at least 9 months' practice in general machine building trades.

Besides this 2 years' practice or apprenticeship the candidate for admission must produce proof that he has either attended an industrial school or completed the fifth class of a middle school. In exceptional cases only and on account of especially good work students from an industrial continuation school may gain admission. It is important that pupils who possess the certificate for 1 year's military service or who have finished the classes of a middle school, mentioned above, should receive additional instruction in an industrial school in addition to their practical work before their entrance into the building-trades school.

If a candidate for admission into the first class has taken some other preparatory course he must prove a corresponding degree of knowledge by the passing of a special entrance examination. If students who enter the first class of the architectural division (or who expect to enter the profession of building contractor, superintendent of buildings, or the like) have only had practice as stonecutters or carpenters, they are urged in their own interest to arrange for a longer period of practical experience in the mason trade before entering the business. Those, on the contrary, who have worked as cabinetmakers, glaziers, and the like must, before entering the second or third class, show a longer practical experience in masonry.

In general it is recommended that no long interruption of school attendance be permitted. Students who have dropped out of the institution for a longer period than 3 semesters and who wish to reenter by reason of the new course of study must pass an examination in mathematics and constructional subjects to prove that they are qualified to attend higher classes.

The division for the training of industrial teachers is open only to those who bring proof of having been accepted as elementary school

candidates or of having finished 7 classes of a middle school. The completion of the seventeenth year marks the earliest period for admission into this division. Besides this, it is required that one entering this division shall have finished at least 3 months' practical activity in some large building business, and that before attending the fourth class elementary schoolteachers shall undertake at least a year of further practice, while those coming from the seventh class of a middle school must complete 2 years in practical work. It is recommended that students of the middle school finish 1 year of this practice before they enter, instead of the minimum 3 months' practice.

During their vacations, or during the period of their absence from school, in order that they may advance in their education and increase their understanding of national methods of building, students of the architectural division are directed to prepare photographs and drawings of fine old buildings and their parts. This serves as a preparation for subjects of instruction which form the substance of the course in the next higher class. The examples chosen are sketched under the direction of the teacher.

The students of the industrial teachers' division are required to make use of the autumn vacation for learning some of the industrial handwork mentioned above. The Easter holidays, on the other hand, are used for the taking of photographs of buildings and artistic objects of all kinds. State assistance is at the disposal of both divisions to defray the expenses of visits to manufactories and the like, as well as to pay for well-prepared photographs.

Candidates in this division pay a matriculation fee of 5 marks ($1.19). The tuition fee is 40 marks ($9.52) for citizens of the Empire and 80 marks ($19.04) for foreigners.

At the opening of every semester, instruction in hygiene is given to the new students by the conductor of the so-called Samaritan course. This course covers the principal points a student should know in order to preserve health of body and mind.

In order to promote acquaintance with graphic subjects, all students, from the lowest classes on, have to prepare sketchbooks in an orderly way. The sketches in these books and photographs are as far as possible used in instruction.

EXCURSIONS.

For the encouragement of nature studies and for securing a systematic training in observation, excursions to investigate suitable subjects are undertaken, and wherever possible graphic representations are prepared, to be worked out later in the classes.

Saturday afternoons are free from classroom work, both in summer and winter. On these afternoons, as occasion arises, excursions are

undertaken by all divisions and classes in the school for the purpose of inspecting buildings in course of construction, workshops, manufactories, roads, exhibits, and the like, as well as for practice in drawing in the open and in photographing agricultural buildings, monuments, and other objects worth reproducing.

Students of all divisions and classes take part in excursions in the week after Whitsuntide, which, as far as possible, cover all subjects in the course of study. These excursions are as far as possible in the neighborhood of Karlsruhe, and, as a rule, extend over two days. In case of greater distances three days are used. State aid is given to students to meet the cost of these excursions, and considerable reduction is made in transportation rates. All students concerned must take part in these general excursions.

COURSE OF STUDY.

The course of study of the division for the training of industrial teachers is as follows:

First class.

	Hours.
Mathematics	4
Physics	3
Mechanics	2
Geometrical drawing	2
Descriptive geometry	7
Grammar of form, with sketches	2
Free-hand drawing and painting	22

Second class.

Mathematics	3
Physics	4
Chemistry	3
Mechanics	2
Descriptive geometry	6
Theory of building construction	11
Grammar of form and mechanical drawing	4
Free-hand drawing and painting	9

Third class.

Mathematics	2
Chemistry	4
Theoretical mechanics	2
Descriptive geometry	2
Theory of building construction	9
Building models	7
Elementary mechanics	1
Grammar of form and mechanical drawing	4
Free-hand drawing and painting	9

Fourth and fifth classes.

Mechanics	1
Technology	2
Theory of building construction	7–9

	Hours.
Industrial technical models (building forms of wood and stone)	2
Industrial technical drawings of parts of buildings and furniture	5
Practical geometry	2
Knowledge of machinery	1
Elementary machines	2
Machine drawing	3
Applied free-hand drawing and painting	8
Bookkeeping	4
Political economy	3
Introduction to industrial practice [1]	Time not fixed.
Introduction to industrial-school practice [2]	1

Sixth and seventh classes.

	Hours.
Technology	1
Theory of the consumption of fuel	1
Theory of building construction, with working drawings	9
Theory of construction in iron	2
Industrial technical models of metal, clay, glass, and textiles	3
Industrial technical sketches	9
Drawings of machinery	3
Electro-technology	2
Applied free-hand drawing and painting	8–9
Knowledge of Baden (considering artistic buildings and monuments, and their preservation)	1
Building regulations of Baden, with consideration of its relation to Wurttemberg	1
Theory of exchange	1
Legal knowledge	1
Political economy	3
Introduction to industrial practice [3]	Time not fixed.
Introduction to industrial-school practice [4]	1

These demands upon vocational teachers in Wurttemberg and Baden will seem very high to an American. Our American demands are not as a rule as exacting even as those of Prussia. In both Prussia and America practical men and academic teachers are prepared for service in vocational schools by means of short courses. On the whole, I believe that Prussia demands more of such teachers than America.

In South Germany the vocational work for the lower grades is more highly developed than in Prussia or anywhere else in the world. These States have passed through the period when half-prepared

[1] This item includes visits to workshops of different industries and attendance at courses given for masters of different industries.

[2] A survey of the development of industrial instruction and of the organization of industrial instruction in Baden and Wurttemberg; the rules and decrees concerning management, organization, and instruction in industrial schools; general introduction to the communication of instruction; thorough treatment of instruction in mathematics, including both arithmetic and geometry; study of materials; industrial correspondence and bookkeeping; written work; practice teaching in classes.

[3] This includes visits to workshops of different industries and attendance at courses given for masters of different industries.

[4] This provides for methodical handling of the theory of projection; practical methods of construction in the different industries; technical drawings and modelings in the most important industries; written and graphic work; practice teaching in the Building Trades School of Karlsruhe.

teachers were permitted to undertake educational work of any sort. They have experienced the results of permitting misfit mechanics with little or no pedagogical training, and ordinary academic teachers with no technical training worth mentioning to undertake the preparation of youth for practical life. It is now realized that neither the half-trained mechanic nor the mere academic teacher can be in touch with actual industrial conditions. They endeavor, therefore, by their courses to train the teachers technically and the mechanics pedagogically. They encourage these vocational teachers to keep in touch with actual industrial business conditions, both by constant visits to industrial plants and business operations, and by permitting them to carry on industrial and business occupations as a side issue. This practice is usually discountenanced in America, but in Germany it is believed that it will aid in keeping these schools practical; will prevent them from crystallizing into institutions completely out of touch with the needs of the time.

CHAPTER XII.

EDUCATION IN PORTO RICO.

[An abridgment of the report of 1910–11 of E. G. Dexter, Commissioner of Education for Porto Rico.]

ORGANIZATION.

The commissioner of education for Porto Rico, appointed by the President, is the head of the Department of Education. With the exception of certain classes of teachers, he appoints all subordinates in the department, prescribes courses of study, fixes the length of the school year within legal limits, directs the examination and certification of teachers, and controls the expenditure of all school moneys. He is a member of the Executive Council, the upper house of the legislature, and is ex officio president of the University of Porto Rico and of the trustees of the Insular Library. Associated with him are an assistant commissioner, the secretary of the department, 3 general superintendents of schools, 40 supervising principals, and the necessary business and clerical assistants.

The island of Porto Rico contains 66 units of political organization, termed "municipalities," in each of which is elected a school board consisting of three members. These boards have charge of the common-school buildings, hold title to property, negotiate loans under certain conditions, supervise the discipline of the schools, and, subject to the approval of the commissioner, appoint teachers. They annually submit to the commissioner a detailed statement of the expenditures they desire to make during the coming year, and the approval of that budget is the warrant for the expenditure of the funds listed therein.

Teachers of rural schools enter the service at $30 per school month, and may be promoted to $35 a month after three years' successful experience, and to $40 after five years. Rural teachers receive also an allowance in lieu of house rent, varying from $3 to $8 per month.

Teachers in graded schools in the cities and smaller centers of population receive $45, $50, or $55 per month, according to their classification based upon successful experience. Those who are certified as competent to use the English language as the medium of

instruction receive $5 per month additional. The number of these is rapidly increasing, and within a few years the classification of "Spanish graded teachers" will no longer exist. Graded-school teachers receive from $8 to $20 per month in lieu of house rent in addition to their respective salaries.

The rural and graded school teachers comprise the great mass of teachers in the common schools of the island, and are all chosen by the local school boards, with the approval of the commissioner of education. In addition to them, however, five classes of teachers are appointed directly by the commissioner of education, namely, teachers of English, special teachers in continuation schools, special teachers, agricultural teachers, and high-school teachers.

At least one "teacher of English" must be assigned to each municipality having a graded-school system. One hundred and twelve are included in the provisions for the present school year, at a salary of $75 per month each. They now serve as grade teachers in the higher grades, giving instruction in all the subjects of their respective grades, excepting the Spanish language. The former plan of requiring them to go from room to room, giving instruction in English to all pupils, proved unsatisfactory, for all the other subjects were taught in Spanish and little progress was made in the acquisition of the English language. Nearly all the teachers of English are Americans, and a large proportion were graduated from colleges and normal schools.

Special manual training and trade schools have been established in 12 municipalities, and in each school there must be at least two specialists, one in manual training and one in domestic science, and each must be competent to teach also the academic subjects of the first two years of the high-school course. The budget for the coming year provides for 20 such specialists in continuation schools at a salary of $83.33 per month each.

"Special teachers" are teachers of music and art and kindergarten teachers, and are employed only for the larger towns. The budget provides for 16 of them at $75 per month each.

Agricultural teachers are assigned to elementary agricultural schools, and are employed throughout the entire year at $60 per calendar month each.

High-school teachers receive from $750 to $1,500 each per school year.

The island is divided for purposes of administration into 40 districts, in each of which is a supervising principal who is the immediate representative of the commissioner of education. The salaries of these officers vary from $1,200 to $1,500, depending upon the number of schools under their supervision. An allowance of $240 per

annum is granted to each of them for house rent, and those who supervise more than one municipality are allowed $200 annually in addition.

RURAL SCHOOLS.

With few exceptions rural schools are located in the country districts wherever needed and where funds are available for their maintenance, and they are often reached only by long, hard climbs up the mountain trails. During the school year 1910–11, 1,648 of these schools were maintained, counting as two schools each school building where different groups of pupils attend in the morning and in the afternoon.

Although the number of rural schools equipped with modern furniture and appliances is increasing year by year, still many remind one of the primitive red schoolhouse of New England, with its tables and backless benches. The rural schoolhouses vary greatly in their style of architecture. Some are simply thatched-roof structures of the simplest native construction, while others are substantial cement buildings. Only a comparatively small proportion of these buildings have been constructed by the Government for school purposes, the majority being rented. In no instance, however, is the same structure used for school and for residence purposes. At present 854 different buildings are used for rural schools in addition to the 207 graded-school buildings.

In nearly every instance the surroundings of the rural-school buildings have been beautified by trees and school gardens. This work is done almost entirely by the pupils themselves, and is inspired largely by the Department of Education by offering annually a diploma to the school in each of the 40 school districts which has done most during the year to beautify its surroundings. In fact, as one journeys through the island, the most attractive spots in the landscape are usually the school buildings, with their pretty gardens and the Stars and Stripes floating above them.

Considering the fact that at the time of the American occupation there was but one building within the island used exclusively for school purposes, the progress which has been made is little short of marvelous. With 1,061 buildings used exclusively for school purposes, there is one such structure for each 3.4 square miles throughout the island. Only in a very few States of the United States is the territory tributary to a schoolhouse so small as in Porto Rico, and those States are among the most thickly populated of the northeastern tier. But because of the density of the population there is only one school building for each 1,053 people, while for the United States there is one school building for each 345 inhabitants.

The course of study for the rural schools covers a six-year period, although not all of the rural schools have students in all the grades. Up to the year 1907–8, none of the rural schools of the island carried its pupils beyond the third year. Conditions are, however, rapidly changing and it seems probable that within a few years no one of the schools of this class will be offering less than a full six-year course.

GRADED SCHOOLS.

Graded-school systems are maintained in each of the 68 municipalities of the island. In each instance such a system is found in the principal center of population of the municipality, and in a considerable number of municipalities in the more populous barrios. The course of study of the graded schools covers the full eight grades of the common-school course, although in a few municipalities no students have as yet reached the upper grades. Students who complete the full eight-year course and pass an examination set by the department, which is uniform for the island, receive a common-school diploma. For the school year 1910–11 the number of candidates passing this examination was 967. The number of persons receiving a common-school diploma has increased very rapidly during recent years.

Persons from other countries visiting the graded schools of the island are impressed by the favorable conditions under which the work is carried on. The buildings, mostly of a modified Spanish type of architecture and nearly all constructed of cement, are pleasing in appearance, well lighted, and well ventilated. With the climatic conditions prevailing in Porto Rico the problem of heating is entirely eliminated and the problems of ventilation are reduced to a minimum by the prevailing custom of constructing buildings with windows extending practically from the ceiling to the floor. These windows are entirely without glass and are open throughout the school session, except when occasional showers make it necessary to close the shutters. The ceilings in all schoolrooms are high, usually between 12 and 14 feet from the floor, all of which conditions make for perfect ventilation. In fact more healthful surroundings in school work could hardly be found than those enjoyed by the graded-school pupils in Porto Rico. Almost without exception the school equipment is as complete and perfect as can be found anywhere. Adjustable desks of modern type of construction are used for the pupils, the teachers are provided with adequate desks, the blackboards are in many instances of slate and ample in amount, while charts, maps, and globes are provided as needed. Great pride is taken by both teachers and pupils in schoolroom decoration, and classrooms are rare in which framed portraits of Washington, Lin-

coln, or some of the more recent Presidents of the United States are not to be found, and frequently well-selected engravings or other pictures find places on the walls. The graded-school buildings are usually named after some prominent personage—the names of Washington, Jefferson, Lincoln, McKinley, and Roosevelt, and of other prominent Americans being frequently used. In some instances schools are named for Porto Rican patriots, but in no case has the name of a living Porto Rican still in active political life been approved for this purpose by the Department of Education. Among the more pretentious graded-school buildings of the island are the Jefferson School of Arecibo, with 22 rooms; the San Juan Public School No. 1, with 21 rooms; the Caguas Public School, with 16 rooms, and the Roosevelt and McKinley Schools of Ponce, each with 12 rooms.

The course of study for the graded schools is quite abreast of that of the best public-school systems in the United States. In fact in not a few instances pupils have removed to the States after having completed in part the graded-school course of the island, and have entered grades in advance of those in which they were enrolled while in Porto Rico. In addition, moreover, to the academic accomplishments required by equivalent grades in the United States, the pupils from the Porto Rican schools were bilingual, having approximately equal proficiency in the Spanish and English languages.

In a considerable number of the larger towns of the island instruction is given to pupils in the upper grades in manual training and domestic science, though not in a sufficient number of towns to make it possible as yet to include these subjects in the required course of these grades.

SECONDARY SCHOOLS.

High schools.—Fully organized high schools with four-year courses are in successful operation at San Juan, Ponce, and Mayaguez. In each of them is to be found a fully equipped commercial department, in addition to classical and scientific courses, which are equal to those of moderately well-equipped high schools of the United States. Their graduates enter any college or university in the United States without difficulty.

No student is admitted to any of the high schools of the island who has not completed the eighth year of work in the graded schools, or its equivalent. The requirements for graduation and the course of study are the same for all the schools. The requirements for entrance to the commercial courses are the same as for the other courses, but the time required to complete them is but two years, at the end of which time a certificate is granted. These courses include all the

subjects necessary to preparation for the work of a stenographer, typewriter, and bookkeeper.

The Central High School at San Juan has never been provided with adequate quarters, and is at present occupying what has been known as "Las Palmas Hotel," in Santurce. The building is beautifully situated, with large and attractive grounds, and answers very well the purpose for which it is used. The instructional force of the school consists of a principal and nine assistants, including special instructors in music, drawing, and domestic science. The last-named department is well equipped for the present needs of the school. The enrollment for this year is 140.

The Ponce High School, with an enrollment of 236, is the largest in Porto Rico. It provides, in addition to the high-school courses, courses for teachers, under the supervision of the normal department of the University of Porto Rico. The normal students take their diplomas from the normal department of the University, and 33 received licenses to teach in the public schools of the island. Most of the graduates of the four-year course continue their studies in the north, and the school has representatives at Cornell, Syracuse, Wesleyan, University of Pennsylvania, Pennsylvania State College, Stevens Institute, Wellesley, Woman's College of Baltimore, Swarthmore, Wilson, University of Louisiana, etc., all of which institutions they enter on the certificate of the school. All graduates of the commercial course have secured positions, and most of them secure places before completing the course, so great is the demand.

The Mayaguez High School opened the school year of 1910–11 with an enrollment of 100 pupils. There is a faculty of five instructors, which will be increased for the next year in order to meet the demand which the increase in enrollment will necessitate.

During the past year ninth, tenth, and eleventh grade work has been offered at Arecibo, and the budget for the year 1911–12 makes provision for a fully equipped high school at that place, with four teachers.

Continuation schools.—The continuation schools of the island are only in their inception, the first having been established less than two years. These schools take pupils who have received the eighth-grade diploma, and carry them two years further in their educational career, the basis of the course being manual training, domestic science, and sewing. At the end of this two-year period the pupils are prepared to go out with a fair knowledge of the practical side of life, or they may enter the high schools, receiving full credit for all work done in the continuation school. With the beginning of the school year 1911–12 each one of the 12 schools of this description will have benches and full manual training equipment for from 12 to 24 boys, and domestic science equipment for an equal number of girls, as well

as all the requisites for courses in sewing and other branches of household economy.

The total enrollment for the high and continuation schools for 1910–11 was 905, as compared with 711 for the previous year. The average daily enrollment was 788 for the past year, and the average daily attendance, 738.

AGRICULTURAL INSTRUCTION.

One of the main difficulties which have prevented more rapid extension of the work in agriculture has been the impossibility of securing teachers competent to give instruction in the subject. In the early days of the American school in Porto Rico there were 19 so-called agricultural schools scattered over the island. These schools were planned to combine instruction in agriculture with the ordinary instruction given in the rural schools, but the results obtained were far from satisfactory, as it was not possible to differentiate these schools sufficiently from other rural schools, obtain competent teachers, and secure pupils who, by reason of age and physical development, were fitted for agricultural labor.

As a result of discussions, the teachers of agriculture during the past year have not been placed in charge of schools and have not been obliged to teach any branch other than their specialty. They have been assigned to different towns, and have given instruction to all pupils enrolled in the graded schools who were old enough and who were physically able to benefit by such instruction. Due to budgetary limitations but five teachers of agriculture were appointed for the past year.

According to reports received, a total of 1,663 pupils, an increase of almost 500 as compared with the preceding year, received practical and theoretical instruction in agriculture. Generally speaking, pupils from the fourth grade and upward received instruction for four periods of 30 minutes each week in the theory of agriculture, and practical instruction was given for one or two hours once a week.

In developing the practical side of agriculture emphasis has been placed not only on beautifying the school surroundings, but also on beautifying the public plazas and the homes. In nature study, which is a required subject in all first, second, and third grades in the island, emphasis is laid on elementary agriculture and school gardening. Flower gardens have been cultivated by the girls, while individual vegetable gardens occupied the attention of the boys. In some municipalities each pupil had a plot averaging about 10 by 10 feet, and tomatoes, lettuce, potatoes, corn, beets, peppers, beans, peas, gandules, okra, eggplant, melons, etc., were raised. The fact that the girls in many instances made use of the pick and shovel, the long-handled spade, and even the wheelbarrow, leaves no room to doubt the interest

aroused. The smaller children were taught to use only the lighter implements, such as hoes and rakes, but the larger ones built fences, laid paths, opened ditches, mixed fertilizer, and applied manure and lime.

The proper value and full dignity of manual labor have been emphatically impressed on pupils and parents as well, and the small children and young men and women alike have not hesitated to soil their hands in the various field and garden operations entrusted to them.

In at least one town an agricultural exhibit was held toward the close of the school year. This exhibit was a complete success and was attended by such numbers that many had to wait outside the building until there was room to enter.

For the present school year 10 special teachers of agriculture are included in the budget, and these will receive pay for the 12 calendar months instead of for the 9 school months, as heretofore. At the present time these teachers are conducting summer schools in agriculture in the towns to which they are assigned, and pupils of the upper grades, teachers, and any others able to profit by the courses are allowed to enroll. These teachers are to hold conferences of a practical nature with the parents and farmers and in every possible way arouse the interest and enthusiasm of the general public.

Wherever possible during this year the teachers of agriculture will meet the rural teachers once a week for the purpose of giving them practical lessons in agriculture and of explaining the best methods to be used in teaching this subject to their pupils. All teachers and others who attended the Insular Fair saw what could be done with comparatively little labor and expense in the beautification of school grounds. The department was granted the use of a piece of marsh land adjoining the model rural school building, and this was converted into one of the beauty spots of the fair. The land was drained and artistically laid out in plots for flowers and vegetables. It was not an infrequent sight to see teachers with paper and pencil in hand making a sketch of the model school garden in order to carry out in their own schools the ideas suggested.

Training in agriculture is essential and is adapted to the children of Porto Rico, and as soon as a sufficient number of competent teachers can be secured it should be made obligatory in all the schools of the island.

INDUSTRIAL WORK FOR BOYS.

Previous to the year 1907 there was in operation a system of trade schools in the larger cities of the island, but the legislature of 1907 failed to make appropriations for their continuance and they were discontinued.

With no appropriation specifically for the work in the manual arts in the public schools in general, it has not been possible to accomplish much along those lines. However, in some instances teachers have been found with special aptitude for constructive work in wood and iron, and such teachers have been encouraged to devote time during the school hours to such work. In this way hundreds of pupils have been receiving instruction in woodworking and in the construction of various articles from such native products as bamboo, calabaza, and various fibers.

At the Insular Fair there was a surprising display, especially from the rural schools, of products of this kind. In many instances real artistic ability was expressed in the objects constructed, and under better organized and more specific instruction it would seem that there are great economic possibilities in such work.

In addition to this semiofficial manual instruction regular manual training shops are in operation in connection with the schools of nine towns, with about 500 pupils receiving instruction. The work varies from clay modeling and whittling to regular bench work. In one town, Rio Piedras, the boys built a two-room house for a carpenter shop and domestic-science room, and made their own tables, besides other articles for the use of the school. In another town playground apparatus was built, repairs were made on school buildings, and a fence was constructed in the plaza. A further indication of the interest in this work is the fact that there are 48 students enrolled in the manual-training classes in the two summer institutes now in session.

From the indications here given it would seem that there is a sufficiently strong desire on the part of the people of Porto Rico to warrant more decided steps in this direction in the future. Such advance has been partly provided for in the new course of study for the continuation schools, and will be prosecuted in lower grades wherever practicable. A special teacher, experienced in giving manual training, will be assigned to each continuation school next year, and instruction in this work will be offered to as many boys of the graded schools as can be accommodated.

SEWING.

In 1909–10 instruction in sewing was offered in but one town of the island, but the interest of parents and pupils was such that it was decided to offer such instruction in as many towns as possible during the past year. As no provision was made in the budget for this phase of work an appeal was made to the school boards, urging them, if possible, to provide the necessary equipment to establish the classes and to vote a small amount as compensation to the teachers. The school boards responded in a way that was exceedingly encouraging, and as a result work in sewing was offered in 56 of the 66 towns of

the island, and 5,241 girls, or almost 76 per cent of those enrolled in the grades and schools in which sewing was offered, took advantage of the instruction.

Needles, pins, thimbles, scissors, paper for drafting patterns, and cotton, muslin, and linen cloth were provided by the school boards in many instances, while in others the equipment was supplied by either the pupils or parents.

The Porto Rican girls are very apt in making embroidery, fancy lace, and drawn work, but are not so efficient in plain sewing, mending, darning, and patching. Therefore great stress was laid on the teaching of the elementary stitches on heavy cloth and on the application of the principles of the art of needlework to the requirements of the home. At first practically all the pupils wished instruction in fancywork rather than in plain sewing, but the interest in the latter increased very gratifyingly during the year.

The exhibit at the First Insular Fair of work done in the sewing classes was of exceptional interest and value. About 1,000 different pieces were displayed, including practically everything from samples of the different stitches, patches, etc., to the most beautiful laces and drawn work.

In some towns the garments made in the sewing classes were given to poor children in order that they might attend school, and in others they were given to hospitals and other charitable institutions.

Whenever the materials were furnished by the parents the articles made were taken home. In several instances where the local board furnished the materials the articles made have been sold and the proceeds devoted to the purchase of more material or to help to support the school libraries, bands, or playgrounds.

COOKING.

Instruction in cooking was continued in the high and grammar schools at San Juan and extended to three other municipalities, viz, Rio Piedras, Juncos, and Yauco, during the past year. The total number of girls enrolled for this work in the above-mentioned towns was 159. Teachers with special preparation have had charge of the work at each place and, with the exception of San Juan, the equipment has been furnished by the local school board.

In each town where cooking classes were established the attitude of the general public was highly satisfactory, and as a result many pupils reported that their parents had bought ovens and other utensils used in the schools in order to prepare their food at home as taught in the classes.

One town reported that for the next year a class in cooking would be held early in the morning before school begins, in order to prepare coffee and bread to be sold at cost to the children who come to

school without sufficient nourishment. Not infrequently children become faint in school for lack of food, and poor children who can not afford to pay for a cup of coffee will be given work after school hours.

The little that has been done along this line is sufficient to prove the necessity of extending this kind of instruction as rapidly as possible. The number of teachers able to give instruction in this branch will be greatly augmented by the large number of young ladies who are taking the courses in domestic science offered in the normal department of the University of Porto Rico.

To each of the continuation schools allotted for the coming year a teacher will be appointed who is capable to teach cooking and sewing to the girls, and this work will be made obligatory. It is also hoped that the school boards in all towns where competent teachers are to be found will provide the necessary equipment in order that as large a proportion as possible of the girls enrolled in the graded school system may receive instruction in both cooking and sewing.

MUSICAL INSTRUCTION.

Special teachers of music have had charge of the musical education of all the pupils enrolled in the graded schools of San Juan, Ponce, and Arecibo. In all other schools of the island the regular room teacher gives instruction in this branch, but instruction is confined to the teaching of patriotic songs in both English and Spanish and many rote songs for use in connection with the opening and closing exercises and school festivals.

In 29 towns of the island school bands are maintained by the local school boards. Each band is under the direction of a competent instructor, who gives instruction not only to members of the band, but also to as many other boys as possible. As a rule the school bands play while the pupils march in and out of school and at all school entertainments. Not infrequently the bands give evening concerts on the public plazas.

During the past year the school boards have spent over $7,800 for music, instruments, and salaries of instructors, and a sum equal to or greater than that amount has been raised by public subscription and donations from municipal councils.

The excellence of the school bands was demonstrated at the competitive contest of school bands held during the First Insular Fair, at which 11 different bands were entered.

NIGHT SCHOOLS.

These schools have been maintained during the past year in every municipality of the island. The school law provides that the commissioner, upon application from 20 or more young persons unable

to attend day school, may establish a night school, and that adults may be admitted to such school when, in the judgment of the local school authorities, they are able to profit by the instruction offered and their presence in the school does not operate to the exclusion of eligible young persons who desire admission. The night schools are intrusted to the care of day-school teachers, who receive extra compensation for this additional service.

As night schools can be conducted at a relatively small expense, it has been the policy of the department to establish them wherever there was reasonable prospect of success. In light of the results obtained in the night schools established in the rural sections during the past year and due to the repeated requests from young people in the country many more schools of this class have been in operation during that year than ever before.

A few night schools in the larger cities of the island have been conducted exclusively in English and the number of night schools in which English has been taught as a special subject has been greatly increased.

In Ponce a night school in mechanical drawing has been in operation during the past year, but as it did not appeal to many persons outside the student body of the high school, the attendance was small and the results accomplished were not very satisfactory. Several supervising principals have recommended that sewing and manual training be introduced into the night school next year, and wherever possible it will be done.

During the first term of 1910–11 there were 262 night schools in operation, 273 in the second term, and 245 in the third term. On March 1, 1911, when the annual school census was taken, there were 8,780 pupils enrolled in the night schools as compared with 4,962 on the same date of the year preceding.

MILITARY DRILL.

Largely as the result of the interest aroused by a letter from the Department of Education, military drill was established in not less than 21 municipalities of the island, with a regiment of 1,089 boys under drill. The military organization has always been familiar to the people of Porto Rico and they seem to have an innate aptness for military tactics. The pupils as a rule have made very rapid progress in drill, with marked results so far as erectness of carriage and general tidiness of person are concerned.

Of the 21 companies in the island, 13 are uniformed, while 7 are provided with guns. In some instances these are but wooden arms, not infrequently made by members of the companies themselves, but answering every purpose.

It is hoped that before the end of another school year companies will have been established in other towns of the island, and that the benefits of a summer encampment may be had.

In addition to the companies here mentioned, many of the towns have companies of boy scouts, with one of the teachers as scout master.

SCHOLARSHIPS.

The Legislative Assembly of Porto Rico has at various times made provision for the maintenance of deserving students at different educational institutions through the establishment of scholarships, and at present it is doubtful if there is a more complete system of scholarship support in vogue in any country. In fact, it is possible for a bright pupil in the remotest barrio within the island to be carried through to graduation at the best university in the United States entirely as a Government scholarship student.

Through legislation passed in 1908 school boards are empowered to use not to exceed 5 per cent of their total funds for the purpose of maintaining at the graded schools of the urban center of the municipality pupils who have completed with credit the work of the rural schools. During the past year 28 such scholarship students have been maintained by 11 school boards, at a total expense of $2,124.63. This makes it possible for a bright child in the barrio to secure his eighth-grade diploma as a scholarship student in the urban center. Having received his eighth-grade diploma, there are open to him, through appointment by the commissioner of education, 80 scholarships, of an annual value of $108 each, in the high schools of the island. Since the amount mentioned is actually paid to the scholarship student in cash and since there are no charges for tuition, textbooks, or supplies, it is quite possible for the student to maintain himself entirely upon his scholarship allotment.

In case the preference of the eighth-grade graduate leads him in another direction, there are open to him 40 scholarships in the agricultural department of the University of Porto Rico of the same value as the high-school scholarships. Deserving students hold these scholarships for the full four-year course of the Agricultural College and are graduated as scientific agriculturists.

To students who have completed the first year in the high schools or continuation schools of the island—that is, have completed the ninth-grade work in the school system—there are open 75 scholarships in the normal department of the University of Porto Rico, each of a value of $200 annually. Graduation from this department of the university means immediate entrance into the corps of public-school teachers of the island with a practically assured income during good behavior.

To students completing the common-school course is also open another class of scholarships for study in Tuskegee Institute, Hampton Institute, or other institutions of a similar character in the United States. Twenty scholarship students are maintained in this class, each receiving an annual income from the Government of $250.

The most desirable of all the scholarships maintained by the Government of Porto Rico are those providing for study in the colleges and universities of the United States, such scholarships being of an annual value of $500. The law establishing these scholarships provided for 25 for men and 14 for women, though of recent years the annual appropriations have not provided for so large a number of either sex. The law requires that the commission intrusted with the appointment of such scholarship students shall in the case of men give preference to the students who wish to fit themselves as scientific agriculturists, engineers, or foresters. At present scholarship students of this class are pursuing courses in Columbia University, Cornell University, University of Pennsylvania, University of Illinois, University of Louisiana, Massachusetts Institute of Technology, and other prominent institutions of the United States.

Besides the foregoing classes of scholarship students maintained by the Central Government of Porto Rico, the legislative assembly, at its last session, empowered the municipalities of the island, under certain restrictions, to maintain scholarship students in the colleges and universities of the United States out of their own funds. As yet no students have been sent to the United States under this law, but a list of the higher institutions in the United States giving the courses prescribed by the bill has been sent to the municipal councils by the commissioner of education, and it seems probable that some students may be sent to the United States under this bill during the coming school year.

TEACHERS' CONFERENCES.

During the past year 179 conferences of teachers have been held throughout the island, with an average attendance of 989 teachers, an average of 4.3 conferences per district, with 23 teachers in attendance at each. In addition there have been held a large number of smaller meetings of teachers for the purpose of discussing in greater detail the work of certain grades.

The programs sent in to the department denote a distinct tendency to avoid pedantic discussions and to get down to the real problems that confront teachers in classroom work. The topics are few enough in number, so that each one may receive thorough consideration. Especial interest has been aroused this year by the introduction of experience meetings, question boxes, and round-table discussions.

An important feature of this year's teachers' conferences has been the continuance of the model class conducted by a normal graduate or by one of the stronger teachers. Weaker and less experienced teachers thus have an opportunity to observe the practical application of the best methods and to learn how to improve their own work.

As a rule the conferences are conducted wholly in English, for the majority of the teachers are steadily acquiring facility in the use of the language and welcome every opportunity for practice. There is, however, no requirement as to the language to be used. The greatest importance is attached in these conferences to the interchange of ideas in a free and thorough discussion, regardless of the medium of expression.

Whenever it has been possible a member of the department has been present at the teachers' conferences to assist in the discussions and to promote the sentiment of solidarity throughout the school system. Athletic contests, competitive drill of the cadets, baseball games, picnics, and informal social functions have frequently been held during the year at the time of the conferences. The meetings sometimes take the form of a literary contest between different towns and include speeches by representative citizens.

INSTRUCTION IN ENGLISH.

English as a medium of instruction in the various branches of the common-school curriculum was first introduced during the year 1905–6, when 74 schools were taught entirely in this language. Since its introduction there has been a widespread interest in the English language and a very general desire on the part of both pupils and parents to have the schools conducted entirely in English wherever possible. In accordance with this desire the number of schools to be taught with English as a medium of instruction has increased gradually year by year. This growth is evident from the following statement:

Schools taught in English.

Graded schools.	1905–6	1906–7	1907–8	1908–9	1909–10	1910–11
Taught wholly in English	74	202	288	442	607	659
Taught partly in English	86	187	128	64	67	31
Schools with English as a special subject, or with no English	340	113	147	157	4	5
Total	500	502	563	663	678	695
Percentage wholly in English	15	40	51	67	90	95
Percentage partly in English	17	37	23	10	10	5

Before the opening of the school year 1909–10 no rural schools were taught wholly in English. During that year 124 rural teachers, at their own request, were given permission by their supervising princi-

pals to conduct all their classes in English. The results were so satisfactory that during the past year the number of rural schools conducted wholly in English was increased to 154.

During the coming school year over 550 Porto Rican teachers who hold the English graded license will impart instruction in the various branches of the graded-school curriculum entirely in English, as compared with 449 the preceding year. The use of English as a medium of instruction has developed to such an extent in the graded schools that at the present time there is not a single one in the island in which no English is taught, and only three in which instruction in the different branches is given in Spanish with English as a special subject.

The result obtained in the use of English in our schools is all the more noteworthy as it has been brought about largely through the efforts of the Porto Rican teachers, who have rapidly qualified themselves to teach in English through constant effort, attendance at the summer institutes, and by taking the course of English offered by the department during the school year.

SCHOOL CELEBRATIONS.

The custom of celebrating legal and school holidays has always been observed in the Porto Rican schools and during the past year the celebrations were unusually successful. Parents do not visit the schools as a rule, especially since the instruction in graded schools is in English and not intelligible to the most of them. The school entertainments, however, serve not only to impress upon the children the ideas and ideals inherent in the day itself but also to provide a suitable occasion for parents to come into closer contact with school work and its motives.

Thanksgiving Day, Arbor Day, celebrated the day following Thanksgiving, and Washington's Birthday, are observed as holidays in all the schools. To these have been added Tuberculosis Day, the Friday before the day designated by the governor as Tuberculosis Sunday, and Memorial Day. Parents' Day is celebrated at some time near the close of the year, no special date being fixed by the department. On this day model classes and exhibits of work are given special prominence, the intention being to let the parents see the actual progress the pupils have made in their work. Parents' Day has been well received and now has its recognized place among school celebrations.

The celebration of the other holidays was carried on in the usual manner, the exercises consisting of selections, songs, and addresses by prominent citizens.

SUMMER INSTITUTES.

The experience of this summer has proved that there is a real demand for summer institutes. The teachers have responded in large numbers and the enrollment this year is larger than ever before; in fact is too large to be handled well with the equipment and corps of teachers available. The enrollment at Rio Piedras on July 31 was 391 and at Ponce 333.

One of the most encouraging features of the institutes this summer is the attitude of deep interest and industry with which the teachers view their work. They have come to work, and the difference is felt by both teacher and student.

Another encouraging feature is the large proportion of teachers with graded or English graded licenses who are enrolled. It was feared at first that these institutes might develop into a sort of training school for those who were preparing to pass examinations for a higher grade of license. The English graded teachers constitute about one-fourth of the number enrolled this summer, and a very small per cent of them are planning to take the examination for the principal's license. The great majority are there simply for the sake of self-improvement.

SCHOOL LIBRARIES.

The library movement, inaugurated about January 1, 1909, had resulted by the end of that year in a total of 81 libraries with 9,038 volumes in rural and graded schools. The figures for the year just closed are 239 libraries with a total of 39,716 volumes. Only seven municipalities are without libraries in their graded schools, and only four without libraries in either graded or rural schools. In addition to school libraries, there are in the island 10 libraries open to the general public, containing 23,297 volumes. The largest of these is the Insular Library in San Juan, supported by insular funds and containing about 15,000 volumes. This makes a grand total of 65,013 volumes accessible to the school children throughout the island. In a number of towns funds have been raised for school libraries by giving school fiestas or entertainments.

The graded-school libraries are in most cases kept in one of the schoolrooms, which is open to the pupils for reading and study for a couple of hours each evening, usually in charge of a teacher. This has had a decided influence in securing better school work as well as in keeping the children off the streets at night. The careful reading of a story book in English can but result in a more rapid acquisition of the language and a better understanding of school work.

SCHOOL PLAYGROUNDS.

Since the playground movement in the various towns of the island was instituted by the Department of Education in 1908 steady progress has been made. The municipal councils have very generously cooperated in the movement by donating land to the school boards in many instances and by providing funds for equipment. In many instances private individuals and corporations have demonstrated their desire to give the Porto Rican children an opportunity for spontaneous play by giving either apparatus or money and donating or giving the use of land so that the children could enjoy free out-door exercise without danger from passing vehicles. In several towns the school boards bought land for the playground. The public plazas in a few towns have been changed into recreation centers through the kindness of the municipal authorities. At the present time very few towns of the island have not provided in some way a place for the boys and girls to play, and more or less apparatus.

For the most part the apparatus used in the playgrounds has been made of native wood by local carpenters. This has made the first cost of the equipment very low as compared with the prices of steel apparatus, and also reduced the cost of transportation to a minimum. A number of school boards have, however, provided large playgrounds fully equipped with the most modern steel apparatus, and, as the cost of keeping the home-made apparatus in repair is considerable, it would seem advisable to purchase steel equipment wherever the school boards have sufficient available money.

In six towns—San Juan, Rio Piedras, Humacao, Santa Isabel, Yauco, and Manati—teachers with special training have supervised the children while at play. In all other muicipalities acting principals, teachers of English, or graded-school teachers have cooperated heartily in providing a pleasant and profitable pastime for their pupils outside of class hours.

The playgrounds have been open, as a rule, before and after school hours and during recesses. In at least one town the children are allowed to utilize the playground during the evening on moonlight nights.

The establishment of playgrounds in connection with the country rural schools is an encouraging feature of the movement in favor of the physical welfare of the Porto Rican children. In several municipalities playgrounds with good equipment have been provided for all rural schools in the district, and the number of rural playgrounds will increase rapidly in the next few years. As most rural schools have double enrollment, the children who receive instruction in the forenoon can devote the afternoon hours to natural play in the open

air, and those who attend school in the afternoon have the forenoon hours for exercising their muscles.

Our national game of baseball continues to hold first place as a group game for the Porto Rican boys. There is hardly a town without its baseball team, and in some districts teams have been formed by boys in the rural schools and interesting games are played with the graded-school team. Contests between teams of adjoining municipalities have been more frequent during the past year than in former years, and in every instance a hearty spirit of rivalry has prevailed.

The annual athletic meet for boys of the high and grammar schools of the island was held March 24 and 25, 1911, at the new athletic field at Ponce. Thousands of parents and children occupied the grand stands, and great enthusiasm was displayed during the two days' contest. The Ponce school band furnished music throughout the contests, and winners and losers alike left the field in the best of spirits.

SCHOOL BUILDINGS.

There has been no decrease in the interest shown in past years by the school boards and the department in the erection of school buildings. Every effort is made to lessen the number of rented schoolrooms, and as rapidly as the resources of the school boards permit new buildings are erected. In the past year some half dozen school boards have taken the steps necessary to obtain a loan from the Insular Government with which to build schools and in this manner do away with the payment of excessive rents.

At the present time there are owned by the people of Porto Rico and used exclusively for school purposes 89 graded and 234 rural schoolhouses, as compared with 64 graded and 174 rural schoolhouses in 1907.

At the last legislative session there was appropriated another $40,000 to further the work begun by the appropriation of a like amount in 1908. From this "school-building fund" school boards may obtain a sufficient amount to pay for the cost of a building of the size warranted by the school population and repay half or other proportion of the cost at a low rate of interest. The construction of the cheaper buildings of the price of $250 is still carried on, and of the $40,000 set aside for this purpose $30,833.86 has been spent to date.

There is a promising outlook for the construction of a great number of good houses during the coming year, and it is hoped that within the next three years every one of the 68 municipalities will own its own school buildings.

ORIGINAL RESEARCH.

For the first time in its history the Department of Education has given its attention in a modest way to certain studies in the field of original research—first, to a study of ethnology, and, second, to a study of folklore. So far nothing has been accomplished along the line, and perhaps will not be, by the Department of Education, yet a mass of material is being collected which, placed in the hands of competent students, can not fail to be of great value. The department is in official touch directly with 2,000 or more teachers and, through them, with 150,000 pupils, representing practically every family in the island. It is not strange, then, that with such an advantage the department is able, more perhaps than any other organization, to come in touch with the people as a whole and learn from them conditions and customs in even the remotest part of the island. The first step in the ethnological study was the issue of a circular letter to supervising principals of the island directing them to report:

First. The exact location and a more or less detailed description of any evidences in situ of Indian occupation or activity within your district. Such evidences would consist of burial mounds, playgrounds or athletic fields, shell heaps, pictographs, excavations, or any other Indian construction which because of its character has been too large to remove and is consequently still in position. Under these headings please report the slightest traces or the most imperfect examples as well as the best.

Second. As complete a list as possible of Indian relics now owned by individuals within your district, and, if possible, a statement as to whether the pieces thus owned—

1. Would be donated to the Insular Library and Museum.
2. Would be loaned.
3. Could be purchased; and if so, what would be the price. Such relics could consist of axes, spearheads, knives, collars, idols, balls, or any other piece plainly of Indian origin.

As the result of the circular letter, reports have been received from the 40 supervising principals, and the returns are being tabulated and a map constructed showing the existence of ethnological evidences throughout the island.

The second study mentioned, that of folklore, in the form of songs and ballads, was made possible through the generosity of Mrs. F. R. Hoisington, of New York City, which enabled the department to offer prizes to the pupils of the public schools for the largest and most meritorious collections of "*canciones antiguas de España y Puerto Rico*." The prizes are of $25, $15, $10, and $5, respectively, for the four leading collections. The following are desired:

1. The ballads that are old and of Porto Rican or Spanish origin.
2. The name of the person signing them or telling them, and as much information as possible as to the origin of both words and music. For instance,

whether the song is founded on fact or whether the air is by a Porto Rican musician, and if the author of the words is known.

3. Especially wanted are the songs sung by the blind men of Porto Rico, to the guitar and guichero accompaniment.

4. Songs sung by mothers and nurses to children.

Already many of the districts of the island have signified their intention to enter this competition, and it seems probable that much valuable material will be forthcoming.

STATISTICS.

Summary of statistics for the school year 1910–11.

Number of different pupils actually enrolled in all schools, including special schools:	
White—	
Males	64,675
Females	45,142
Total	109,817
Colored—	
Males	20,812
Females	14,896
Total	35,708
White and colored—	
Males	85,487
Females	60,038
Total	145,525
Number of different pupils enrolled during the year:	
(*a*) In secondary schools (normal and agricultural departments of the university, high, and continuation schools)	1,026
(*b*) In common schools	128,453
(*c*) In special schools (night schools, kindergartens, and charitable and correctional institutions)	15,528
Average daily attendance for the school year of 175 days (night schools, 136 days)	103,102
Average daily enrollment for the school year of 175 days (night schools, 136 days)	113,008
Number of buildings in use for schools during the year (town, 163; rural, 879)	1,042
Estimated value of all insular school buildings[1]	$759,414.51
Rental value of other buildings	$67,977.72

[1] Including entire expenditure made by the Insular Government under direction of the Department of Education in connection with the acquisition of property and with the erection of school buildings since the establishment of civil government.

Number of different teachers employed in the common schools at the end of the year:	
White—	
Males	772
Females	675
Total	1,447
Colored—	
Males	114
Females	104
Total	218
White and colored—	
Males	886
Females	779
Total	1,665
Number of different teachers employed in secondary schools at the end of the year [1]	72
Number of different teachers employed in special schools at the end of the year [2]	255
Total expenditures for school purposes, 1910–11:	
By Insular Government	$878,635.00
By local governments	$403,691.57

Statistics of the public schools of Porto Rico for each year of the American occupation.

Date.	Total enrollment.	Enrollment in secondary schools.	Number of teachers.
1899	21,873	.....	525
1900	24,392	20	632
1901	38,000	54	796
1902	61,863	181	945
1903	70,216	253	1,150
1904	61,168	214	1,229
1905	63,223	244	1,222
1906	68,828	275	1,111
1907	71,696	316	1,177
1908	79,752	376	1,376
1909	105,125	551	1,650
1910	121,453	967	1,692
1911	145,525	1,144	1,745

[1] Seventeen of these are duplicated above.
[2] Two hundred and thirty-seven of these are night-school teachers and are duplicated above.

CHAPTER XIII.

EDUCATION IN THE PHILIPPINE ISLANDS.

[*An abridgment of the annual report for 1909–10 of Frank R. White, Director of Education for the Philippine Islands.*]

The plan of action of the Philippine Bureau of Education contemplates the constant attendance in school of at least one-third the school population of the islands, in the belief that by normal rotation of attendance the present generation may be made literate and given the first essentials of an education within 10 years. Maturity is reached at an early age in the Philippines, and of the present total Christian population of 7,293,997, about one-sixth, or 1,215,666, may be said to represent the legitimate school population. The average monthly enrollment for the year was 427,165—considerably in excess of the proposed average. An effective compulsory attendance law is necessary to prevent irregularity of attendance, but no extension of the school system to provide for a greater number than the present enrollment is possible with the money now available.

The irregular attendance is due, not to an absence of real interest or confidence in the schools, but to a lack of appreciation of the necessity of punctuality and regularity, resulting in part from the conditions that prevailed in Spanish times. Instruction then was given in small schools and teaching was individual rather than by class. A child might enter or leave school at will without apparent loss. Under the present organization, however, a pupil who is irregular fails to advance with the others. The people are coming to realize the desirability of regular attendance and the statistics show steady improvement, but a well-formulated compulsory law is nevertheless needed.

AMERICAN TEACHERS.

Seven hundred and thirty-two American teachers are in the employ of the bureau, and 283 of them are serving as supervising principals. The area assigned to each principal varies greatly, but averages over 300 square miles; the number of Filipino teachers under each varies as much as the territory and may be from 5 or 6 to 40 or 50. The present policy is to confine the attention of the American supervisors to districts of such extent that they will be able not only to supervise, but to give considerable actual instruction to teachers and to do some model teaching. Their districts are growing larger, however,

because the number of competent men is limited, and it is considered wiser to increase their area rather than to lower the standard of work by designating mediocre or inefficient men for such positions.

The method of selecting teachers upon written recommendations has not proved satisfactory, and in every group of new teachers arriving from the States several—sometimes as many as one-fifth the whole number—have shown themselves at once to be incapable of success, either because of personal uncouthness or some crudity amounting in individual cases to simple ignorance. It is contemplated therefore to send a trusted official of the bureau to the United States to act as appointing agent. All appointments will then be made as a result of personal investigation and inspection, and it is expected that only men and women of superior qualifications will be brought into the service.[1]

FILIPINO TEACHERS.

Of the 8,275 Filipino teachers employed, 1,010 are paid by the Insular Government, 7,120 by municipalities, and 145 are apprentices without pay. The average compensation of the insular teachers is 44.66 pesos per month; of municipal teachers, 18.29 pesos. The legislature has authorized a more liberal salary schedule for the teachers on the insular rolls, and their number will be reduced by eliminating those who are least worthy of the distinction. Very interesting and valuable data have been gathered relating to the qualifications of the Filipino teachers, and it is evident that they are advancing in efficiency. It will be the policy of the Bureau of Education in the future to assign to the Filipino teachers with special preparation the most responsible work of which they are capable. Those especially who have been educated in the United States and in the insular normal and trade schools will have the widest possible opportunity to exercise all the ability that they possess.

COURSES OF INSTRUCTION.

The primary and intermediate courses have been revised during the year, and the practical trend of the primary courses has been extended with even greater stress to the higher grades.

The primary course covers 4 years, and from the first emphasis is laid upon industrial work. Each pupil must take in each grade two industrial courses, which include weaving, gardening, woodworking, modeling, lace making, basketry, pottery, sewing, embroidery, poultry raising, and domestic science. The usual scholastic branches are not

[1] Mr. George N. Briggs, former superintendent of the Philippine Normal School, at Manila, is now attached to the Bureau of Insular Affairs of the War Department and is charged with the duties described.—ED.

neglected, for the industrial work requires only from 30 to 60 minutes daily, according to grade.

The intermediate course occupies the fifth, sixth, and seventh years. The daily session is of 6 hours, divided usually into 8 periods of 40 minutes each, with rest periods. Six courses are arranged, namely, a general course, a course for teaching, a course in farming, a trade course, a course in housekeeping and household arts, and a course for business.

In the general course, industrial subjects similar to those of the primary grades receive three double periods per week in each grade, the remaining time being given to academic instruction, drawing, and agriculture.

The course for training teachers contains in addition to the academic branches, one year's work in the native arts which form the basis of the industrial work in the primary schools, one year's work in agriculture and gardening, and one year of elementary normal instruction. This course, pursued by a sufficiently mature student, is expected to produce a competent primary school teacher.

The course in farming is, with a few modifications, the course prescribed for the various school farms that are conducted by the Bureau of Education. The academic studies are substantially the same as for the general course, but are correlated in every way possible with farm work and farm life. In Grade VI two double periods each week are given to carpentry, and in Grade VII similar time is allotted to blacksmithing. Three periods daily are given to farm work in Grade V and VI, and four periods daily in Grade VII.

In the trade course almost half the time is devoted to work in the shops. For the present the academic work is similar to that of the general course.

The course in housekeeping and household arts is given to girls in the schools in which the trade course is given to boys, and may be given elsewhere if the facilities permit. The essential subjects of the course are covered in an elementary way in the general course, and to a small extent in the course for teaching.

The course for business was outlined to meet the incessant demand for young men and women who can speak and write English, keep accounts, and use a typewriter.

The secondary course, covering four years, is now undergoing revision, particularly with respect to English, science, and economics.

The Philippine Normal School, while similar in standard to the general high-school course, gives preparation for teaching. Secondary instruction is given in the School of Arts and Trades also, in coordination with shopwork.

TEXTBOOKS AND BULLETINS.

The textbook problem is a perennial one in Philippine school administration. In the early years of American occupation the only English tests available for school use were such as are ordinarily employed in the public schools of the United States. For many reasons they are wholly unsuited to use in these islands.

The primer and readers contain much of the changes of seasons of a temperate country, and of fruits and flowers and birds which have never been seen or heard of there; of a home life and social customs which are beyond the experience and comprehension of children of the Tropics. The arithmetics deal with weights and measures unknown in the Orient; their problems are based on the buying and selling of products in which these pupils have no interest. The geographies are descriptive of North America and the States of the Union; they ignore the home of the Filipino, and give scant treatment to the Orient in general. The histories deal with America and Europe, making no mention of the Philippine Islands, and little of China, Japan, and Malaysia. The texts on nature study and animal life tell the child of a vegetation and a fauna which are as strange to the Filipino as German script is to a boy or girl in an American primary school. However, in course of years, by selecting the best books presented the bureau has finally secured a consistent system of primary texts, well printed, well illustrated, strongly bound, attractive in general appearance, and admirably adapted to the experience and needs of the Filipino children. Several very excellent intermediate books have also been prepared.

During the past year the need for other texts and manuals in certain special lines has been evident. In the absence of any other suitable source of supply, several bulletins or manuals have been prepared, or are in process of preparation, by the bureau, after extended consultation by committees of superintendents and teachers best qualified to work. These manuals relate to school and home gardening, freehand and mechanical drawing, embroidery and lace making, domestic science, accounting, etc.

INDUSTRIAL INSTRUCTION.

The most important work to which the Bureau of Education has addressed itself during the past year has been the organization, promotion, and proper supervision of industrial instruction.

In the Philippines, while various lines of industrial work have been introduced into the schools in the past, the present administration, with the effectual assistance of a large portion of the field personnel of the bureau, has been devoting itself to formulating and putting into operation a program of industrial instruction which

shall be at once logical in its sequence from grade to grade and in close harmony with the industrial needs of the country.

Considerable progress has been made in the introduction of industrial instruction. The present effort is in the direction of putting method and purpose into this teaching. So far as possible, the handwork of every school is being commercialized; instruction in the minor industries will have in view the training of the pupil to make always a serviceable and salable article. The aim is to operate every trade school and every school farm on a business basis. Handwork doubtless has considerable educative value in itself as a class exercise, but the present policy of the Bureau of Education in this connection is not so much to secure mere pedagogical results as it is to make the relation between this instruction and everyday industrial life as immediate and evident as possible.

Industrial work of the schools as at present organized falls into four general divisions; namely, minor industries, gardening and field agriculture, trade and manual training work, and housekeeping and household arts. Some of these lines are followed through the several years of the elementary course. By reason of the expensiveness of equipment necessary in certain branches of the work and the lack of a sufficient force of trained teachers, the standard of instruction has not been fully attained or the desired results accomplished. However, in view of all conditions, the recent advance has been very satisfactory.

Minor industries.—The opportunity for doing an interesting and original piece of work is perhaps greater in the development of local native industries than in any other line. Hand weaving can be undertaken by the pupils at a very early age; even those enrolled in first grades may learn to make articles of real value. The possibilities of Philippine fibers are quite unknown. Unlimited quantities of various straws, grasses, and sedges, and different varieties of rattan and bamboo are available almost everywhere; abacá, maguey, cotton, piña, kapok, coir, cabo-negro, pasao, buri balangot, and ticog can be obtained by little labor and frequently with no expenditure of money. Articles of simple workmanship may be produced from these common materials with wide opportunity for the exercise of taste in selection. Baskets of bamboo and buri can be made even by the youngest pupils. Through the normal progress from simple to more difficult weaves and patterns, pupils proceed to the manufacture of hats, mats, slippers, book covers, book satchels, baskets, hand bags, trays, hammocks, picture frames, curtains, cushions, and other useful and salable products. It is believed that in time this plan will result in the development of a large body of skilled workers who will be able not only to improve the facilities and attractiveness of the

home, but also to promote local industries which will enter into the world's trade.

As an illustration of the possibilities of this situation, attention is invited to the hat-making industry as it now exists in the Philippines. Four valuable varieties of hats are manufactured—the Buntal, the Sabutan, the Baliuag, and the Calasiao—all of which require the exercise of great patience and skill in the making. They are made from fibers which are common throughout the islands, but each variety of hat is produced in only a single community or within a restricted area. All of these hats, if made in acceptable styles, would find a large market in the United States. A single Manila dealer has recently received orders for a million Philippine hats. He is absolutely unable to fill these orders in any measure, simply because the product is inadequate in quantity. The public schools are giving constant attention to this matter of hat weaving, and there is no question that within a comparatively brief period the number of persons skilled in this art may be so increased as to materially affect the trade of the country.

Gardening and field agriculture.—Gardening is prescribed for every primary school. In nearly all divisions a serious effort has been made to meet this requirement, and an increase in the number of school gardens has resulted, 1,684 being reported for the year—an average of about 50 for each Province. Among the varied products are corn, gabi, colis, onions, tomatoes, radishes, eggplants, beans, peppers, sweet potatoes, lettuce, cabbage, garlic, squashes, and pechay. In many communities the product of the school and home gardens has become a considerable factor in the daily ration of the people. Vegetables are now commonly grown in larger quantities and greater variety than formerly, a fact which indicates that this particular phase of industrial work has been productive of good results.

The experience of the bureau with school farms has not been extensive, nor have the results been altogether satisfactory. Twelve sites in all have been surveyed for such institutions, comprising 1,634 hectares. Many of these are admirably situated, fertile, and adapted to the cultivation of the varied products of the islands. On these sites are 26 temporary buildings used as classrooms, tool sheds, and dormitories.

The task of standardizing school farms is still in the experimental stage; no type has yet been fixed upon as wholly satisfactory. One of the most promising is that which is being developed at Batac, Ilocos Norte. This farm consists of 6½ hectares and is operated in connection with an intermediate school. Last year 80 boys worked on the land an average of about 2¼ hours daily. They maintained 52 garden plots and planted and harvested creditable amounts of

rice, tobacco, peanuts, and corn. The equipment of this farm is inexpensive.

Steps have been taken toward the introduction of sericulture in several Provinces. During the year Filipino teachers from various divisions were sent to the Bureau of Science in Manila for a brief course of instruction in the several processes of silk production. Mulberry cuttings have been, and are still being, sent by that bureau and the Bureau of Agriculture to favorable points in various parts of the islands for planting. At the Batac school farm a substantial building with cement floor has been constructed for use in this connection, and the necessary racks, trays, and other equipment have been provided. Five hundred mulberry trees are growing on the premises. In Cavite, Cagayan, Cebu, Pampanga, and Pangasinan this industry is also receiving attention in the schools.

The Bureau of Education recognizes as one of its legitimate functions the teaching of practical agriculture, but it is not an experimental bureau. It is not its business to undertake to demonstrate when there is any doubt as to the successful result of the demonstration. As to what to plant in this country and how to plant it, care for it, and harvest it, the Bureau of Education may properly, and does, look to the Bureau of Agriculture for advice and instruction. The Bureau of Agriculture is the agency of the Government which is supposed to understand best all the difficulties of this peculiar situation and to be best able to advise as to how those difficulties may be met in a practical way.

Trade and manual training schools.—During the past year a somewhat close distinction has been drawn between the terms "manual training school" and "trade school." It is believed that the trade school is the type of institution needed here rather than the manual training school. As rapidly as possible the woodworking shops connected with provincial high schools are being reorganized and established as practical institutions upon a business basis. The trade school of Iloilo is typical of what the bureau is undertaking in this line. It is a self-supporting institution where students earn enough to support themselves while securing their training by manufacturing articles of commercial value. House building has recently been added to the course of instruction of that school, and certain advanced pupils are now constructing, under contract, a bungalow to cost about 3,000 pesos.

Preliminary and preparatory to the work of both these classes of instruction is tool work in the primary grades. The number of primary schools in which woodworking was offered during the past year was 158, with 6,335 pupils engaged in the work. It is the purpose to ultimately introduce it into all higher primary grades throughout the islands. In the intermediate grades the boys are required to com-

plete a series of prescribed exercises in woodworking. When a measure of proficiency has been attained school furniture and equipment for the home are commonly manufactured.

There are now 35 provincial trade and manual training schools equipped with woodworking tools; 25 of these have been supplied with woodworking machinery, a few are provided with blacksmithing outfits, and 1 with a small set of ironworking machinery. These equipments are sufficiently complete to warrant the placing of the schools upon a commercial footing when the pupils have reached the required standard of proficiency and provincial funds are available for the support of the institution upon the preferred basis. About 6,126 boys received regular instruction last year in these institutions.

Housekeeping and household arts.—In the primary course instruction in so-called domestic science includes elementary sewing and the cooking of simple dishes of the country upon native stoves. This instruction was given last year in 527 schools to 12,603 girls. Lace making and embroidery have recently been added to the course of study as optional subjects. These latter industries are believed to be susceptible of very extensive and profitable development in the Philippines. Many of the women and girls throughout the Provinces have received some instruction in these lines in the convents. Because of their great natural aptitude for this sort of work, their patience, and delicacy of execution, the Filipino women are considered among the most skillful workers in the world in these arts, their product being classed by experts as even superior to that of the French and the Swiss. These are essentially household arts, however, carried on independently under crude conditions, without system, and frequently following ancient models with no attention to modern demands. The work needs to be systematized, the girls instructed with reference to modern style and trained to use suitable materials. Indeed, much has already been accomplished in this direction in the schools of Manila, Albay, and one or two other divisions.

In the intermediate course instruction in housekeeping and household arts was given in 117 schools to 3,857 girls. The course includes sewing, cooking, house sanitation, use of disinfectants, introduction of new and better food elements, care of the sick, and care of infants. In several Provinces model homes have been constructed in connection with the provincial high schools, and theoretical instruction in housekeeping has been given in connection with actual training in household duties.

Industrial teachers.—The corps of American teachers in manual-training and trade schools is somewhat larger and more efficient than it was a year ago, and the teachers of domestic science have also increased in number and in familiarity with the requirements of the service. Instruction in the minor industries can be generally intro-

duced into primary schools only through the medium of trained Filipino teachers. The work of manual-training and trade schools and domestic-science classes must be execedingly limited in scope if it is to be handled by Americans only. One of the most important obligations of the bureau at the present time is evidently the training of Filipino teachers in these special lines. The Philippine School of Arts and Trades, the Philippine Normal School, both in Manila, the various industrial schools throughout the islands, and the annual teachers' institutes in all divisions are making it one of their chief aims to accomplish this purpose as speedily and efficiently as possible.

SCHOOLHOUSE CONSTRUCTION.

To meet the demand for permanent, sanitary schoolhouses the Bureau of Education last year adopted a set of standard plans for provincial, central, and barrio schools of a type peculiarly adapted to the Tropics.

The basic material of construction, as contemplated in the standard plans, is reenforced concrete. With foundations and walls of concrete, the remaining parts of the building may be made up largely of local materials; the roof must be of iron. Reenforced concrete is now generally used in the construction of public buildings in the Philippines; for schoolhouses it offers advantages with which other materials can not compete. It makes the most permanent of buildings, withstanding earthquakes and the severest storms; it can be handled, with proper supervision, by unskilled workmen; it offers a clean surface against disease germs and resists better than stone and mortar the attacks of termites and other insects.

During the past few years appropriations have been made from time to time for the construction of intermediate, secondary, and trade schools, and the buildings for which the funds were allotted are all either finished or nearing completion.

An appropriation has been secured for the construction of a new building for the academic work of the Philippine Normal School. Plans have been completed, and a splendid building will be constructed in the central part of the city of Manila. This building is to be three stories in height, of reenforced concrete, and when completed will be one of the finest structures in the Philippine Islands.

A large amount of construction has been made possible by Act No. 1801 of the Philippine Legislature, passed on December 20, 1907, appropriating the sum of 1,000,000 pesos for primary-school buildings throughout the islands. To secure an allotment a sum equal to one-half of the amount apportioned from insular funds must be made up from municipal resources. As a matter of fact the municipalities

have far exceeded the required municipal donation. When this appropriation has been expended there will have been erected over 300 modern school buildings of permanent construction, perfectly adapted to the climatic conditions of the Philippines—a system extending throughout the archipelago, from the capital to remote barrios.

SCHOOLS OF GENERAL SCOPE.

The Philippine Normal School has undergone reorganization during the past year. That institution was established in the early days of the Bureau of Education, and has been continuously under intelligent direction of competent superintendents. However, the aims of the school, over a period of years, gradually came to comprise the training of young men and women for various professional and academic careers other than teaching. Courses were established in preparation for the study of medicine, law, engineering, agriculture, and nursing, as well as for entrance into general collegiate work. In this field the institution doubtless served a good end, as there was no other school in the islands devoted to preparing students for these various professional studies. But the school reached such a state that its graduating classes included very few pupils prepared for teaching, but large and increasing numbers who were expecting to engage in other pursuits. The legitimate function of the normal school was in a measure overlooked.

In effecting the needed reorganization the normal school proper, with its primary and intermediate training departments, its industrial classes for young men and women, and its academic work of high-school standard, was set apart as an independent institution with a separate corps of teachers; and the large number of special students were grouped under another organization and faculty, known as the Junior College. Only such students were continued in the normal school as were definitely intending to devote their lives to teaching, and the instructors were advised to turn their whole effort to improving the native teaching corps of the islands. The field has been brought into touch with the school, which, as reorganized, constitutes a far more effective department of the Bureau of Education than ever before.

The Philippine School of Arts and Trades, an insular institution coordinate with the normal school, has likewise experienced a growth in the past year, but it has not been subjected to any general reorganization. It comprises departments of bench woodworking, machine woodworking, wood finishing, machine ironworking, blacksmithing, wheelwrighting, automobile repairing, mechanical drawing, and academic work. The value of the manufactured product of the students of this institution for the year ending June 30, 1910, was 21,837.72 pesos.

In the normal school, the trade school, and the college of agriculture, the Bureau of Education maintained last year 222 scholarship students. Of this number 88 were so-called "student pensionados," who, before appointment, had advanced in academic qualifications to at least the third year of the prescribed high-school course. They were all enrolled in the normal school. The remaining number were distributed among the three institutions above named and were so-called "teacher pensionados;" that is, each must have taught for a period of two years in the public schools before appointment to Government pension. All of these scholarship students accept appointment under contract to serve the Government as teachers for a time equal to the period during which they are maintained as students at Government expense. This scholarship system is a very advantageous arrangement for the Bureau of Education in the present status of its work. It provides means for the training of a large number of selected young men and women for the teaching profession. It gives opportunity to many faithful and efficient Filipino teachers to continue their studies and so increase their value to the Government, when otherwise they would in time necessarily be replaced by younger men and women more advanced in scholarship but inexperienced in teaching. Furthermore, this system will enable the Bureau of Education to develop various lines of industrial instruction much more rapidly than would otherwise be possible. Every scholarship student in the normal school, in addition to receiving needed instruction in academic and normal subjects, is trained in some specialty, as loom weaving, hat weaving, sewing, cooking, lace making, embroidery, or music; those in the trade school are given definite preparation for service in the field as teachers of woodworking in primary schools and as assistants in provincial school shops; those detailed to the college of agriculture receive training both technical and practical, in preparation for teaching the subject of their specialty in intermediate and high schools.

The Insular School of Commerce, at Manila, was transferred early in the year from inadequate quarters to a large, finely situated building on Calle General Solano. The enrollment for the school year was 395. One of its departments has undertaken what promises to be an exceedingly valuable work in collaboration with the general office in the collecting of accurate and extensive data on present industrial conditions throughout the Philippines.

The School for Deaf and Blind enrolled 19 pupils, as many as could well be cared for.

CONVENTIONS AND ASSEMBLIES.

The Teachers' Vacation Assembly, with its camp in the Baguio hills, has become an established institution. The session of the assembly proper began on April 11 and closed on May 7, but the camp

was not broken until May 21. During the session 215 superintendents, teachers, and others connected with the bureau enjoyed the benefits of the invigorating climate of this mountain country and of the lectures, entertainments, and conferences which made up the program of the assembly. Classes were conducted by competent instructors in lace making, embroidery, science of education, Spanish, and Philippine history. Probably the most valuable feature of the year's session was comprised in the series of conferences of supervising teachers, high-school principals, and industrial instructors. There have been in former years conventions of division superintendents, in which the problems of the field have been discussed by them and the directors of education from the standpoint of the superintending and directing force. Opportunity for discussion of these problems by the teachers themselves was never before officially offered, however. Most of the conferences were largely attended; the benefits both to the instructors and to the directors present were of undoubted value.

A number of Filipino teachers from the schools of the city of Manila attended the assembly at Baguio, entering largely into the life of the camp and apparently enjoying its benefits.

There was convened in Manila an institute for Filipino teachers at the Normal School from April 18 to May 13. It was attended by 785 teachers, representing nearly every Province in the archipelago. The instruction was made as practical as possible, industrial subjects being taken up in a more business-like manner and with far better results than in any former gathering of teachers in the history of the bureau. In vacation classes of the Philippine School of Arts and Trades, from April 11 to June 3, 105 teachers were enrolled, all being engaged in preparing themselves to offer instruction in woodworking in primary classes. Large summer institutes were convened also in Dumaguete and Iloilo for the benefit of teachers in the Visayan Islands. The aims and methods of these assemblies were similar to those of the institutes held in Manila.

ATHLETICS.

The year just passed witnessed a growing interest in school athletics; three interprovincial track and baseball meets took place. Such contests are now becoming well-organized annual events in various parts of the islands. The enthusiasm and good fellowship which characterize them have done much to bring about more cordial relations among neighboring Provinces. Everywhere they are training into the Filipino youth a spirit of friendly rivalry and are displacing former questionable pastimes.

Careful training for these meets is producing a better showing in all events, and in some the records are approaching standard athletic

marks. Aside from the organized meets, progressive schools in all divisions have their baseball teams and on their own initiative arrange and play games with neighboring schools.

In intermediate classes, tennis for boys and girls and basket ball for girls are gaining favor as school recreations. For the coming year more ambitious gatherings are planned, and the carnival events for 1911 will doubtless include entries of well-organized teams from several sections of the archipelago.

FILIPINO STUDENTS IN THE UNITED STATES.

The number of students sent to the United States on Government scholarship is decreasing. The chief reason for this decrease lies in the fact that several institutions of higher education have now been established in the Philippines. In former years superior instruction could only be obtained abroad, but since the organization of the several branches of the university of the Philippines and certain special schools the needs of the higher student body can be better met in insular institutions than in the United States, where many of the conditions bearing directly upon instruction appropriate for these islands are unknown.

AIMS OF THE BUREAU.

The principal and most immediate aim of the bureau is, and probably always will be, to make the largest possible number of the youth of the country literate in a common language. However, there are certain phases of the work of the bureau upon which especial emphasis is to be placed during the coming year.

In the development of industrial instruction the administration of the bureau is hampered by no embarrassing precedents; it has reasonably ample funds with which to execute its plans, and, best of all, it has in a most gratifying measure the moral support of both Americans and Filipinos in its attempt to build up a system of instruction which will promote the industrial efficiency and material well-being of the population. Such another opportunity probably never existed anywhere. It is perhaps not going too far to venture the assertion that within two or three years no State or National Government will have in practical operation a system of industrial instruction more consistent than that of the Philippines in its sequence through the various grades or more closely adapted to the material conditions and requirements of the country.

With respect to schoolhouse construction the year 1910–11 is going to mark a greater advance than any preceding year in the history of the bureau. The directing and superintending force of the bureau is devoting its energies most seriously to the building problem. Even

if funds continue to be available as at present, it will take a decade to erect a system of buildings adequate to properly house the nearly 5,000 schools now in operation. A large advance over the present situation can be effected, however, in a single year. It is desired to establish such a standard that the people of the provincial capital, the municipality, and the barrio shall look to the buildings of the public school as the most substantial and attractive structures in their respective districts.

The Bureau of Education occupies a unique position among all the branches of the Government in that with its corps of superintendents, supervisors, and teachers it has nearly 10,000 employees in daily touch with almost half a million children, through whom its influence reaches into every town and every important barrio in the archipelago and touches every day, directly or indirectly, the major portion of the population of the islands.

As a medium for dispensing general information with respect to the policies of the Government or upon any other subject of common interest this bureau is a valuable agency.

Its cooperation has been freely given and with good effect: (1) To the Bureau of Health, in advising and instructing the people as to precautions against epidemics and upon sanitary measures generally. Especially earnest has been its participation in an organized campaign against tuberculosis. (2) To the Bureau of Agriculture, in advising the people as to the proper method of soil cultivation and as to the varieties of plants best adapted to the Philippines. (3) To the Bureau of Posts, in the establishment of the Postal Savings Bank. (4) To the Department of Justice, in spreading knowledge of the rights and duties of citizens in their relations to the Government and to each other. (5) To all the bureaus, in supplying them with young men and women trained as clerical assistants. The Bureau of Education has thus rendered valuable assistance to other departments of the Government, and it is now coming into a position where it can be of much greater help to them than ever before.

CHAPTER XIV.

GOVERNMENT AND PUBLIC INSTRUCTION IN NETHERLANDS-INDIA.

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INTRODUCTION.[1]

In the future administration of dependent peoples the public instruction of the native population will overshadow other problems of empire. Colonial policies directed exclusively at material achievement, and resting on the assumption that industrial development alone is sufficient to secure the contentment of the subject race, are representative of the past century rather than of the present. The decades immediately before us will see such policies end either in disaster, as was the case with the reactionary Spanish policy in the Philippines, or in such thoroughgoing reorganization as will guarantee the spiritual enlightenment of the colony and the preparation of its people for leadership.

One of the first colonial powers to recognize the changed spirit of colonial undertakings was Holland. In the administration of her magnificent Empire of Netherlands-India there has begun an educational expansion that promises to be one of the most significant factors in the present history of colonial empire. For many years Holland has been the stock illustration of a colonial power that successfully pursues a policy of commercial exploitation without regard to the intellectual and political advancement of the native peoples under domination. Recently—in fact, within five years—Holland has so

[1] Published information on the government of Netherlands-India, outside of the Dutch language, is meager. M. Chailley-Bert's *Java et ses habitants* contains a suggestive and careful discussion of native instruction, written, however, before the recent significant changes in educational policy. Prof. Clive Day, in *The Dutch in Java,* skillfully summarizes the economic policy and disposes of current misconceptions of the "culture system," but barely touches the question of native enlightenment. The Dutch public is served by able periodicals and reports devoted to colonial administration but the information there furnished rarely makes its way to English readers. The observations and statistics herein presented were, for the most part, furnished directly to the writer during a visit to Java in the fall of 1909. Grateful acknowledgment of information and invaluable assistance is made to His Excellency, Gov. Gen. Van Heutsz; to Dr. M. S. Koster, director of the department of instruction, worship, and industry; and to Mr. N. J. Verweij.

radically modified her attitude on the subject of native instruction as to make her one of the leading countries with an educational program for her subject population.

THE ISLANDS AND PEOPLES OF NETHERLANDS-INDIA.

Next to the British Empire of India, the colonial possessions of the Dutch in Malaysia impress one as the greatest empire of dependent peoples in the world. The Dutch power in the East Indies extends unbrokenly from west to east for more than 3,000 miles. From the northwesterly point of Sumatra to the heart of New Guinea, where the sovereignty of Holland ends, is farther than from San Francisco to Baltimore. This territory embraces most of the important islands of the world that are held as colonial possessions. It includes the major part of the two largest islands of the world, New Guinea and Borneo; the richest and most populous island in the world, Java; and the famed and long-coveted "Spice Islands," the Moluccas, whose lure drew the Portuguese around Africa, launched the caravels of Columbus, and tempted the daring Magellan to find a new way around the world. These islands have been for more than 300 years in the tenacious grasp of Dutchmen and are still held without evidence of weakening power.

Four-fifths of the Malay race inhabit islands under Dutch rule. Of the four colonial powers holding Malayan possessions, Great Britain governs 600,000 in the Malay Peninsula; France, approximately 1,000,000 in Madagascar, with allied native races in Indo-China; the United States, 8,500,000 in the Philippines; and Holland, 40,000,000 in her Empire of Netherlands-India, of which number nearly three-quarters, or 30,000,000, are on the single island of Java. Java has from the beginning been the seat of Dutch power. The most highly developed and most successfully administered of any part of the East Indies, the importance of this island in the Dutch system is shown by the organization of the Empire into two parts—Java and the "Outer Possessions" (Buitenbezittigen). The latter include the islands of Sumatra, with Banka, Billiton, and the little archipelago of Rhio south of Singapore, the greater part of Borneo, Bali, Lombok, Sumbawa, the western half of Timor, the island of Celebes, the Molukkas, Gilolo, Western New Guinea, and the small islands like the Ke and Aru groups, inhabited by black peoples, lying to the westward of New Guinea. These black or Papuan peoples add a second race to the natives under Dutch rule, but as their numbers are few and their culture low they present no problem of government such as is afforded by the numerous and diverse peoples of Malayan stock.

DUTCH ADMINISTRATION.

The administration of this vast Empire is strongly centralized. The executive and legislative authority over the entire Indies is vested in the Governor General, whose residence is at Batavia or at Buitenzorg, on the island of Java. The "Council of the Indies," consisting of five men of high qualifications and long experience, acts as an advisory body. Native regents and rulers are appointed and may be deposed by the Governor General. He appoints Dutch regents and controleurs and all other officials, as well as the heads of the various departments which administer the affairs of the Empire. His legislative authority, under advice of the Council of the Indies, is limited only by the fundamental law of Netherlands-India, the Regeerings-Reglement of 1848, or by other legislation of the States-General of Holland.

Dutch administration has been developed to a remarkable degree of thoroughness and efficiency. A complete system of packet boats connects every port of the Indies, and flat-bottom steamers penetrate the shallow rivers even to the interior of Borneo. All parts of this vast territory have regular communications with Batavia or Sourabaya. The Dutch rule appears extremely effective. It is evident everywhere. Its presence means the suppression of native feuds and violence, the opening of communications, the encouragement of agriculture, and the protection of the native from injustice. For some years the peace of Netherlands-India has been undisturbed by rebellion. On the island of Celebes there have been some recent minor troubles with the still barbarous people, but elsewhere, since the suppression of the Achinese of northern Sumatra, Dutch rule has been peaceably enforced.

EUROPEAN COLONISTS.[1]

Few colonies of the world can equal Netherlands-India in outward appearances of prosperity and well-being. The important towns of Java are beautifully situated, durably built, and splendidly furnished with public services. So considerable is the foreign population in many of them that they seem in fact to be European communities set in the midst of tropical scenery and surroundings. They have comfortable hotels, clubs, parks, and private homes.

The best newspapers of the Far East are published in Java in the Dutch language. They are excellently served by cable dispatches and correspondence from the countries of Europe and from the United States. The number of Dutch people resident in Netherlands-India is far larger than that of any other European nationality in the

[1] See Chailley-Bert, op. cit., and Pierre Gounaud: La Colonisation Hollandaise á Java, ses antécédents, ses caractères distinctifs, Paris, 1905.

Orient, even without the considerable element that is of mixed Dutch and Malay descent. Outside of the official class this population is mostly devoted to commerce and to planting, and in both pursuits its success compares more than favorably with that of residents in other European colonies.

CHINESE AND ARABS.

In addition to native Malay inhabitants there are two other non-European elements in the population. One of these is the Arab. Since the thirteenth and fourteenth centuries, when Mohammedanism gained its first spiritual triumphs in Malaysia, there have been considerable numbers of Arab and kindred Mohammedan peoples in the confines of the Malay Archipelago. They are found settled in the Arab quarters of important ports like Batavia, Semarang, Sourabaya or Makassar, or journeying as traders and proselyters among the less important regions of the archipelago. Through their faith, which they have communicated to most of the Malay race, they possess an amount of influence over the population of Netherlands-India which is a source of some uneasiness to the Government.

The other important foreign element is the Chinese, who are settling in nearly all the towns of the archipelago, although restricted as to dwelling and place of business to certain quarters. They number about half a million, the majority of them residents of Java. A large proportion of them are married to native Malay women, or are the offspring of such marriages, and although the Chinese descent of a man may be remote and almost unapparent through predominance of Malay blood, he remains in the legal status of the Chinese and subject to the disabilities of that race. In spite of restrictions placed upon them the Chinese have been immensely prosperous in Netherlands-India, and among their merchants and planters are to be found some of the wealthiest inhabitants of the colony. Much of the privately owned land of Java is in their possession. They own commercial establishments, banks, steamship lines, and other productive sources of wealth.

THE MALAYAN PEOPLES.

The Malayan peoples, while of the common race, present great differences of culture. The typical warlike, independent Malay finds his best type on the island of Sumatra, where the fertile and important districts of Palembang and Menangkabau represent probably the centers of dispersal of the Mohammedanized Malays who founded colonies and effected conquests in nearly all parts of the East Indies. Brunei, the Sulu Archipelago, and Manila had been settled by them previous to the arrival of the Spaniards. The northern part of Sumatra, as before stated, is inhabited by the warlike people, the

Achinese. The island of Java is inhabited by three closely related Malayan peoples who speak different languages—the Sundanese in the western part of the island, particularly in the rich, elevated plateau of the Preanger Regencies; the Javanese in the center of the island; and the Madurese in the east and on the island of Madura. It was among the Javanese that the ancient Hindu civilization reached its highest development. The native kingdom of Majapahit flourished for centuries previous to the Mohammedan conquest, and finds its historic descendants in the present sultanates of Solo and Djokjakarta. This part of Java is covered with remarkable ruins of temples and shrines, which date from a thousand and more years ago. The most splendid of these is the famous Buddhist structure of Boro-Budur.

The influence of this Hindu culture, which prevailed for so long in Malaysia, is still present in the peoples of the Indian Archipelago and extends even to the Philippines. A considerable element in nearly all Malayan language is of Sanskrit origin. The religions of even the wild peoples are permeated with conceptions and deities that are clearly of Indian derivation, while many of the arts of life show an origin from India. The triumph of Mohammedanism on Java in the fourteenth century, and its unrelenting campaign against paganism of every kind, accomplished the suppression of Brahmanism and Buddhism except upon the islands of Bali and Lombok.

The population of Borneo is divided between primitive, pagan peoples and the Mohammedan Malays who dwell along the coast and on the banks of the rivers. In the southern part of Celebes are the Makassarese and the Bugis, who are Mohammedan, while in the extreme north, in the district of Minahasa, the natives are converts to Protestant Christianity, are exceptionally prosperous and docile, and have made great advances in civilization. Elsewhere on Celebes are peoples of different degrees of culture, including some of exceedingly primitive life. On Amboyna the population is Christian, and on other islands of the Moluccas it has reached a state that may fairly be described as civilized. Further eastward the population is a mixed black and brown stock, loosely described as "Alfuros," and from this type it merges into the relatively pure black Papuan or Melanesian.

It will be seen from this brief description how diverse are the elements which the Dutch Government must control and seek to advance in enlightenment and prosperity; a multiplicity of languages and dialects; a wide range of culture representing stages from savagery to civilization; the surviving influences of the civilizations of India, Islam, and Portugal, mingled with the early results of Dutch missionaries and traders. Over practically all of this area standard "Malay," a language of remarkable simplicity and flexibility, is

spoken by most natives, in addition to their local dialects. A knowledge of this "lingua franca" is indispensable to every European resident, and in addition every Dutch official and teacher must learn the dominant native dialect of the district in which his work lies. Thus a man will know Malay and also Sundanese, Bugis or Sangir, according as his work is in western Java, southern Celebes, or on the small but well-developed little islands north of Minahasa and south of the American possession of Mindanao.

THE DUTCH COLONIAL SERVICE.

The administrative force of Dutchmen who rule the destinies of these millions of brown people is, in every way, an exceptionally trained and experienced body. It is a profession for which are demanded high qualifications, thorough training, and special preparation. To this work a man devotes his life and powers unreservedly. The service is almost entirely recruited in Holland, as men of Dutch parentage in Netherlands-India seem generally to prefer the promising opportunities afforded by planting or by business. Entrance to the service is through the "Great Functionary's Examination," and includes studies which have to do with the languages, geography, anthropology, resources, productions, economic conditions, administrative system, civil law, and penal procedure of Netherlands-India. The examinations in native languages include the Malay and Javanese. The candidates are graduates of a Dutch gymnasium or higher burgher school, who have had special technical preparation for the examination. The necessity for such special preparation for colonial service is thoroughly recognized in the Netherlands, as it is in England and in France, and the practice must be followed by every nation which expects to engage successfully in the government of dependent peoples.

The first danger to every colonial service is the corruption and deterioration of the official class. Against this tendency Holland appears to be taking rigorous care. She selects her officers on the basis of a high and rigid civil-service examination. She puts great responsibilities upon them, but she compensates them well, and seeks to provide them with associations and surroundings which will maintain their self-respect and their morale. The devotion of these men to their task appears to one experienced in observing men in similar situations to be of the highest order. Contrary to what is frequently stated, it appears that the official is taught to observe a kindly and considerate attitude toward the natives.

The moral standard of the Dutch representatives in the Indies has greatly improved in recent years. Employees are encouraged to bring their families with them to the Indies. The Government pays all traveling expenses of wives and children and expenses of

return on retirement and on the decennial furlough. Dutch officers are as temperate, certainly in the use of intoxicants, as are Americans or British representatives in the Orient.

THE HISTORY OF DUTCH ENTERPRISE IN MALAYSIA.

The history of the Dutch administration in Malaysia is not easy to present in brief summary. It covers more than 300 years. It began in the government of a chartered company, then became subject to personal rule of the monarch, and finally to the constitutional legislature of Holland. There have been sharp contrasts of policy. The motive behind the enterprise has changed from one period to another. The temper and policy of the administration of Netherlands-India to-day can not be judged from any description of 50 or 25 years ago.

Down nearly to the close of the eighteenth century Netherlands-India, while governed by the Dutch East India Co., was frankly the object of commercial gain. Wars were waged against native sultans and chieftains with the mere purpose of reducing them to a dependent and tributary position, but little interference was made in the local government, nor were the people protected from the rapacity and oppression of native rulers, whose tyranny increased in severity with the increased demands for tribute or "subsidies." In spite of enormous profits gained during two centuries of enterprise under the chartered company, the end was financial bankruptcy and the assumption by the State of the power and responsibilities of empire. The reorganization of the colonial administration had not had time to assume definite character when Holland was invaded by the forces of Napoleon, and for a term of years Netherlands and Netherlands-India were elements of French Empire. There was sent out for the government of Java in 1807 a man whose name is still remembered by the Javanese for harsh and effective rule, Gen. Daendels. It was Daendels who first reorganized the colonial administration and made it a career. He built at heavy cost to native life the great military road that traverses the highlands of Java from one end of the island to the other, and which still stands as a monument to his ruthless energy. He was more or less a type of the Napoleonic period.

In 1811, Java and the other East Indian possessions fell before the invading forces of Lord Minto, the Governor General of India, and for a brief but very important period of six years were administered by the remarkable young Englishman, Stamford Raffles. Neither Raffles's character nor the quality of his service can be estimated here. Suffice it to say that whatever his defects, he supplied elements previously lacking in the administration—humanity and sympathy for the native population. His reforms have become permanent elements in the Government, and it is said that the Dutch

are still working to fully realize some of his advanced ideas. British rule ended in 1816, when Java was returned to Holland. The commission appointed by the Dutch Government to take back again the administration continued in a liberal spirit to carry forward the principles for which Raffles's administration had contended, but soon after, under pressure of economic needs at home, this system was changed by Lieut. Gen. van den Bosch (1830–1839) to a policy of exploitation, the central feature of which was the famed institution of compulsory cultivation known as the "Culture system."

THE CULTURE SYSTEM.

The inauguration of the Culture System (Kultuur-Stelsel) was a frank return to the policy of the old East India Company, the policy of securing the largest possible profit from the lands and industry of the natives. Instead, however, of requiring from each chief the payment of a certain subsidy or portion of the harvests, the natives were required to put at the disposal of the Government a part of their land and of their time. This was theoretically fixed at one-fifth, but in the actual operation of the system, even one-third or one-half of the native resources and labor were required. The system was never put into general operation; its most extensive practice being found on Java, West Sumatra, and northern Celebes, and it was not conducted under identical regulations in all places. Its success was likewise uneven. Many of the crops with which the Government experimented, and which it required the natives to produce, were failures; coffee, sugar, and indigo being the only products from which any considerable income was ever derived. There was, however, a strong pressure from the home Government to secure all the proceeds that the system would bear, and between 1840 and 1874 a total profit of about 781,000,000 guilders or over $312,000,000 was remitted to Holland.

Rather curiously this Culture System has received almost universal approval from English students of colonial administration, and among Americans also there is a widespread understanding that the system was beneficial and effective in increasing the industry and well-being of the natives. There is, moreover, a general impression that the Culture System is still in full operation. All of these views are opposed to the facts and to the best judgment of Dutchmen themselves, who visit upon the system the severest condemnation. In 1848 the States-General by the constitutional change in the Government of Holland obtained control of the colonies which up to that time had been governed under royal prerogative. That date saw the passing of the organic law for the government of Netherlands-India called the Regeerings-Reglement, and from that day the Culture System was subjected to continual assault from the liberal

members of the States-General. Advocates of a more just and generous policy toward the natives had their cause greatly strengthened about 1859 by the writing of a novel which bears the title of "Max Havellar, or the Coffee Auctions of the Dutch Trading Company." From this time on the bitterness of the attacks on the Culture System increased until in 1870 the so-called Agrarian Law was passed, which marks the definite abandonment of the policy. Since that date a liberal policy of free culture with corresponding opportunities for Dutch planters has been followed.

There are a few remnants or vestiges of the old Culture System still. On the high slopes of the active volcano of Tangkoeban Prahoe two years ago I saw patches of old deteriorated coffee, the crop from which must still be sold to the Government at a price lower than the market value.

CHARACTER OF ADMINISTRATION SINCE 1870.

Over the whole extent of Netherlands-India, a policy of paternal care has taken the place of the policy of exploitation. Since the year 1870 the Netherlands have derived no economic profit whatever from the Indies, and all taxation or profits to the Government from its mines, salt works, and other public sources of income have been devoted exclusively to the upbuilding of the colony. Watchful and jealous solicitude for the native's protection has taken the place of the old indifference toward his oppression. The Government through its trained officials watches over native welfare at every point. The village elections, at which the "loera" or headman is chosen, takes place in the presence of a trained Dutch official, who sees that the actual majority preference prevails. Contracts between Dutch planters and the village communities for the lease of their lands are overseen and approved by the Dutch Resident. Everything possible and practicable has been done to increase the productivity of the soil. Probably nowhere in the world do native communities possess such unfailing irrigation systems, such adequate public communications and such healthful and well-kept villages as in Java. While the population is very dense, and the standard of living low, there is nevertheless every evidence of plenty, of contentment, and of health.

In the last 30 or 40 years the Dutch have built up their administration until it is an example of efficiency, experience, and uprightness. The islands are prosperous, the native population is increasing, the opportunities for white men or actual Dutch colonialists are inviting. Coffee planting received a heavy blow some years ago, but the profitable raising of sugar and quinine on Java and the culture of tobacco on Sumatra have more than taken its place.

THE PERMANENCY OF DUTCH RULE.

After three centuries of devotion to tropical service the Dutch show no decline in the virility and will necessary for the management of their vast affairs.

Among many dangers that threaten the permanency of Dutch rule in Netherlands-India is the revival of the Mohammedan faith. Of the 40,000,000 Malay subjects of Netherlands, all but a small minority are followers of Islam. Curiously and interestingly, the opening of this century is witnessing a drawing together and a new wakening of the fires of unrest among the diverse peoples who profess the faith of the Great Arabian. One of the undoubted causes is the improved education which vast numbers of Mohammedans under French, British, or Turkish rule are obtaining. Mohammedans are contrasting their own civilization with that of Christian nations, and without abatement of their confidence in the truth of their own faith they see the higher morality and the greater political efficiency of Christianity. In spite of the assumed inertia and rigidity of Mohammedan thought, something like a leaven of progress is moving in the Mohammedan world. Steam communications now unite all parts of Islam. The pilgrimage to Mecca, at one time taken with risk and expense, is open to thousands. More than 8,000 Malay subjects of Netherlands sailed on pilgrim ships for Arabia in 1908. Everywhere throughout Malaysia to-day one finds the Arabian missionary and proselyter.

It is hardly necessary to say that the Dutch do not fail to study this great phenomenon with the attention which it deserves. Every candidate for the civil service studies not only the native languages of Malaysia, the history of native peoples and their ethnology, but he makes a special study of Mohammedanism as well. One of the remarkable offices in the Dutch administrative system is the position of "counselor for native affairs." For many years this position was filled by a man, now a professor in the University of Leiden, who is, I suppose, one of the most eminent authorities on Mohammedanism in the world—Dr. Snoucke-Hurgronje. For years he sustained sympathetic acquaintance with Malayan peoples. They knew him as a friend as well as an official. He is one of the very few men, perhaps the only living man, who has imitated Sir Richard Burton in accomplishing the religious journey to Mecca in the guise of a pilgrim. It is significant that this man, preeminent for his understanding of Malay character, has been a consistent upholder of the possibilities of the Malay, and the advocate of a generous policy. To his influence are due some of the most significant changes in the Dutch system, looking to a larger participation of the natives in the administration.

Against all possibilities of foreign attack the Dutch oppose a far-sighted watchfulness and care. Every little cloud on the horizon,

albeit no larger than a man's hand, is watched with attention and adequate apprehension. No difficulty is permitted to reach the state of actual disturbance. A high official, after discussing one of the minor causes of Dutch uneasiness, remarked, "You Americans do not have to take great care of such small things, because your size protects you, and a difficulty of this sort may become acute without alarming you, but we are few in number, we have great responsibilities, and we can not afford to let any difficulty progress to the point where it may affect the good will between ourselves and other nations."

The whole Dutch nation gives its closest attention to colonial affairs. Every intelligent Dutchman is informed upon Netherlands India. There is a bewildering number of substantial periodicals devoted to different phases of the colonies. They are unsparing critics of their own institutions, and it is safe to say that after their great triumphs in removing colonial abuses they will not easily permit lower standards to prevail.

The essential factor in the permanence of Dutch rule, however, is still to be stated. It is the attitude of the native peoples. If Holland possessed in her 40,000,000 brown subjects in Malaysia a population sufficiently enlightened and sufficiently devoted to her rule to fight for its permanence, she might face the future with equanimity. But this assurance she does not have.

How is the Dutch Government to meet the rapidly growing unrest which has filled the minds of dependent and backward peoples throughout the Far East—the unrest which for 40 years Spain faced in the Philippines and failed to satisfy; the unrest which spreads more widely in British India each day? The Javanese peasantry exhibit little evidence of it as yet, but in the large cities and ports, like Batavia or Sourabaya, there is an element which gives the Dutch Government great concern. Like the same element elsewhere, it is only partly native; it contains a considerable amount of Eurasian and Chinese blood. It is filled with dissatisfaction at the inferior position in society which it is forced to occupy, and, as in Manila or Calcutta or Cairo, its weapons are a furtive propaganda and a discontented press. It is only a question of time when this revolutionary spirit will permeate large numbers of the population. What is the Dutch Government doing to meet it? It is of great interest to Americans, in view of our own policy in the Philippines, that the Dutch seem to be turning for a solution, as have we, to native education. All over the Indies they are building schools of the most substantial kind—schools for the training of native officials, schools for native teachers, a school in Batavia for the education of native doctors, a new school recently incorporated for the making of native judges, a comprehensive sys-

tem of higher and lower elementary schools for natives in all larger places, and finally a plan for rural village schools, like the "barrio" schools in the Philippines, accessible to the natives of every hamlet. The Dutch Government has already brought out over 1,000 trained Dutch teachers, and is adding to its force at the rate of some 250 a year. Though not yet as widely extended nor as highly developed as the American system of schools in the Philippines, the Dutch school system is its nearest rival among dependent peoples.

EDUCATION UNTIL 1894.

Until near the middle of the last century the education of the native received scant attention. But in 1848, after the Dutch States-General obtained control of the government of the colonies, an appropriation of 25,000 guilders was made for native education. This act is significant rather for its intent than for any considerable practical results which followed. In 1854 the "regeerings reglement" provided that the Governor General undertake the creation of schools for the native population, but these provisions were vague, and in the absence of a sympathetic official element and of a native demand for instruction, were practically inoperative for many years. At last interest awoke; the Department of Education, Worship, and Industries was created in 1868, and about 1872 the organization of schools for the native peoples proceeded with enthusiasm. All sorts of schools were established—schools for sons of chiefs, private schools, normal schools, professional schools—"Ce fut une rage," says Chailley-Bert. Between 1873 and 1882, 249 new schools were opened in the Indies, making a total of 512, with a budget of 1,250,000 guilders.

It is interesting to observe that this general movement was contemporaneous with a similar development of public instruction in the Philippine Islands under the Spanish Government. The public-school system of the Philippines was decreed in 1863, and beginning a few years later, schools were gradually established in nearly every pueblo of the islands. The results of these two movements, however, have been very dissimilar. In the Philippines the native population was considerably in advance of the natives of Java in intellectual training and ambition. There was an important well-to-do class who possessed property and commercial interests, and the mestizo element, both Spanish and Chinese, was identified (as it is not in the Dutch Indies) with the natives. Thus, in the Philippines the Spanish system of public instruction accomplished really great results. In a few decades it produced a class having some education in the Spanish language in practically every town of the archipelago. It prepared the way for the revolutionary movement which has placed the Filipinos far in the lead of other Malayan peoples. In the Dutch Indies, however, no such native support existed. Mis-

givings seem to have seized the Dutch administration, criticisms of so liberal a plan of native education multiplied, economy was felt to be necessary, and in 1884 came a reaction. The development was arrested, no new schools were founded, and a considerable proportion of public schools already established were turned over to private or missionary societies. Of the nine normal schools which had been created five were suppressed, the teaching of Dutch to the natives was discontinued, and in 1896 the Netherlands-India had over a hundred fewer schools than it had 14 years earlier.

Dutch critics of the educational movement of 1872–1884 say that the plan of studies was too occidental in character and did not sufficiently take into account the native needs and the native mind; that it was unpractical and too closely modeled on the educational ideals of Holland. All this may be true, and yet the reaction which lasted for nearly a decade seriously retarded the native development which Dutch statesmen have now come to feel is essential to the further development of the Indies and the permanence of their own power. A similar, but more intense, reaction occurred in the Philippines in 1888, when the Spanish Government, becoming alarmed at the progress of liberal ideas, attempted to suppress the rapidly increasing enlightenment of the population. In the Philippines, however, the popular movement had then become too strong, and when suppression was attempted revolution followed.

In Netherlands-India a reorganization of the educational work was finally seen to be necessary, and in 1892 and 1893 there was sanctioned and put into effect a scheme of native instruction which had been proposed some years earlier by the director of education, Mr. W. P. Groeneveldt. This, with certain important additions of recent date, is the existing system. Under it two kinds of public instruction are maintained, one patterned upon the European system (Europeesch Onderwijs), the other native education (Onderwijs voor Inlanders). However, as the "European schools" are open on terms of equality to children of partly European blood and to children of pure native parentage also, they are an important element in the public instruction of the natives.

THE SCHOOLS FOR EUROPEANS.

The Dutch have taken commendable pains for the proper instruction of their own children in the colonies. The system is patterned on that of Holland itself. Dutch education is divided into lower (Lager Onderwijs), secondary (Middelbaar Onderwijs), and higher or university (Hooger Onderwijs). In Holland the lower schools (lagere scholen) give instruction in the Dutch language and the fundamental branches. This instruction occupies six years, or two

less than the work of similar schools in the United States. Quite as much, however, appears to be accomplished for the child as in the more protracted American course. At the end of this elementary instruction the pupil may enter the "gymnasium" and pursue a classical course of studies for six years, which would correspond to our college course, or he may enter what is called the "higher burgher school," which gives a five years' course. This school offers no instruction in Latin or Greek, but thorough, practical instruction in modern languages—Dutch, French, German, and English. The mathematical work leads into elements of engineering. There is instruction in scientific branches, in history, and in political economy. Following graduation from the gymnasium, or the higher burgher school, the student enters the university or a higher technical school for his professional training.

In Netherlands-India there is no higher or university education, properly speaking, but secondary education is provided. At Batavia is a large and admirable school, founded in 1860, the "Gymnasium Willem III." Although founded as a gymnasium, and so named, the instruction corresponds to that of the higher burgher school. Its course embraces five years and includes higher arithmetic, geometry, mechanics, chemistry, botany, zoology, and cosmography; public law and institutions, political economy, bookkeeping and accounts, history, geography, Dutch language and literature, French, German, English, writing, and drawing. The work in modern languages is especially emphasized, and extends for each language over the entire course of five years. So considerable a number of subjects being pursued, the number of weekly recitations is relatively great, being 36 in the first two years and 42 in the last three. To an American the course would seem to be overheavy and possible of improvement by lengthening to six years. The corps of instructors, who number over 40, are very competent and well-trained men, several being university doctors. They are well paid.

The Gymnasium Willem III also conducts a special kind of instruction (Afdeeling B) in which qualified students are prepared for the civil-service examination. The studies have to do with the languages, geography, and anthropology of Netherlands-India. The work in the history of Netherlands-India includes the methods and results of missionary propaganda and the work in anthropology lays great stress upon the religions of the native people and on Mohammedanism. There is also a second course in the history of Islam. The geography of Netherlands-India includes courses in the administrative system, resources, productions, and economic conditions. The work in native languages includes Malay and Javanese. Two years' instruction is given in the general principles of modern law and in the penal law and penal procedure of Netherlands-India. These subjects of study

cover in a general way the program of the Higher Functionary's Examination (het Groot-Ambternaars-Examen) necessary for appointment to the higher posts of the colonial service.

Besides the Gymnasium Willem III, there are comparable institutions doing the work of a Dutch higher burgher school at Surabaya and Samarang. The Queen Wilhelmina School at Batavia is in effect a group of schools giving secondary instruction, much of it of a technical character.

Lower European schools are found not only on Java but in all parts of the Indies. In 1908 there were 190 public lower schools with 732 European teachers and 21,714 pupils, of whom 9,120 were boys of European birth and 7,371 girls of European birth; 3,693 were natives, 3,190 being male; and 1,530 were Asiatic foreigners, largely Chinese, 1,301 being male. There were also 40 private European lower schools aided by the Government, with over 5,000 pupils, mostly girls. The very considerable proportion of native children attending these schools is to be noted. In 1903 entrance was made easier for natives and the tuition for them was lowered. These steps were taken by the then director of education, Mr. Abondanon, now one of the foremost authorities on colonial matters in Holland.

The rapid increase of native attendance in the European schools was one of the considerations which have led the Dutch within the last few years to reintroduce the Dutch language into native lower schools, and thereby divert from the European schools the unduly large proportion of native pupils desiring Dutch education.

The Government is generous in its policy of organizing new public schools for the European population. The presence of 20 pupils in a locality on Java and of only 15 in the outer possessions is sufficient for the establishment of a school with one teacher; for 60 pupils two teachers are furnished; and for 90, three. A moderate tuition is charged, which is carefully graded in accordance with the income of the child's parents and in no case exceeds 10 florins a month; in certain cases the instruction is gratuitous.

Religious teaching in all the public schools is forbidden. There are separate schools for boys and girls, but the present tendency is toward coeducation. The subjects of study embrace reading, writing, arithmetic, Dutch grammar, history of Netherlands and Netherlands-India, geography, nature study, singing, drawing, gymnastics, and sewing for girls. There are also additional subjects which are offered when possible and which include the elements of French, English, and High Dutch, general history, further work in mathematics, elementary land surveying, etc. The course, as in nearly all Dutch schools, seems very full and perhaps too ambitious, but it is made exceedingly practical.

Compared to the number of European or mixed European people for whom these schools were created, the system must be regarded as exceedingly liberal. This population was reckoned a few years ago at at 80,000, and its children were in public or private primary schools to the number of over 20,000, or more than 25 per cent, the highest percentage of school attendance perhaps in any community in the world. Wherever a settlement of Dutch people grows up the Government sees to it that their children receive the elements of a substantial European education. Their solicitude in this matter is in contrast to the policy of other colonizing peoples. The children of English families in the Indies seem invariably to be sent home for their education, usually at a tender age. In certain important British colonies of the Far East there is not a single school providing an education for foreign children. The Dutch do not believe in the separation of the child from his home; they usually bring their families with them to the Indies, and they have developed a system which guarantees to these children an education certainly not inferior, and probably in some respects superior, to that afforded children in most parts of Europe.

DUTCH SCHOOLS FOR CHINESE.

In 1908 the Government made an important addition to its school system in establishing the "Dutch Chinese Schools" (Hollandsch Chinesche Scholen), to give an education in the Dutch language to the children of the extensive Chinese population. The Chinese in Netherlands-India are now estimated to number about 700,000, and they play a part in commercial and industrial life very similar to that of their countrymen in the Philippines, but there is an important difference. Chinese born in Netherlands-India, including the children of mixed Chinese and native parentage, by Dutch law remain Chinese and are not assimilated to the population of the country. As for many years Chinese have been marrying native wives, it has resulted that the population legally termed "Chinese" is in considerable degree Malayan. In a private school I visited there was a classroom filled with boys, all of whom were termed "Chinese," but only two wore queues, and in most of them Malayan inheritance appeared to predominate over Chinese. These Chinese born in Netherlands-India do not speak any Chinese language. Their native tongue is Malay. They are subjects of the Dutch Government and for generations have been expatriated from China. At all times important to the business of the country, many have amassed great wealth and risen to positions of social influence. There is one wealthy Chinese of Samarang whose wealth I was informed is calculated at $20,000,000 gold. In spite of their thorough identification with the country and their Malayan blood, Chinese are subjected to certain disabilities. Except where

special permission is given them, they are obliged to reside in Chinese quarters and are not free to travel or to accept employment as the native or European may do. Perhaps in part as a result of this illiberal attitude of the Dutch Government toward them, there seems to be a disposition among the Chinese to turn toward the British possessions, and particularly Singapore, which is virtually a Chinese city.

The Dutch Government has come to realize that its past attitude toward the Chinese is not working out a satisfactory solution of their status. There is a recent disposition to recognize an obligation for their education and to seek their affection and allegiance. Chinese everywhere realize the practical value of education and are the best supporters of public schools in British Malaysia. Within the last four years they have entered the European schools in considerable numbers so far as the opportunities have permitted. In 1905 there were 470 boys and 55 girls of Chinese and other Asiatic origin in the European lower schools, but at the end of 1908 this number had nearly tripled.

These considerations led to the first Holland Chinese schools, organized in 1908, and located at Batavia, Samarang, Surabaya, and Macassar. In 1909 seven more were opened, at Menado (Celebes), Bandjermassin (Borneo), Singaraja (Bali), Padang (Sumatra), and at Malang, Surakarta, and Bandoeng on Java. These schools have the same organization and offer the same course as European lower schools. Educationally they promise to be successful, and their political influence may be marked, especially if it leads to the modification of Dutch law liberalizing the status of Chinese subjects.

Comparing the present status of the Chinese in Netherlands-India with that of Chinese residents in the Philippines, one can hardly fail to be impressed with the great advantage of the policy which identifies the descendants of an immigrant with the people of the country. Anyone born in the Philippines is regarded and accepted as a Filipino if he chooses to identify himself with the Filipino people. The sons of Chinese in the Philippines encounter little or no prejudice and often obtain high political preferment as the choice of Filipino electors.

EDUCATION OF NATIVES.

Bearing in mind that the European schools are open to children of native parentage we may pass to that system of instruction organized solely for the native inhabitants (Onderwijs voor Inlanders). The history of this system and its reorganization in 1892–93 has been briefly outlined. It consists, first, of lower schools (lagere scholen) of two kinds, first class and second class. The second-class school course has four years and gives instruction in the common branches, but only in the native dialect and Malay. The first-class lower school

now offers a six years' course and besides instruction in the native dialect and Malay gives three years' instruction in Dutch. The introduction of the Dutch language into these schools is very recent, but there were already in 1909 62 first-class lower schools with Dutch instructors, and 5 new ones for the island of Java will be organized each year in addition to similar schools in the outer possessions. The other subjects of study of the first-class lower school are arithmetic, drawing, geography of Netherlands-India, singing, elements of natural sciences, land measuring, and local history.[1]

The introduction of Dutch into these schools is seen to be a final return to the policy abandoned 20 years ago. The requirement of this language as the basis of instruction seems to have been brought about by several considerations. First, experience has shown that the native languages do not offer the necessary basis for higher training, especially in administrative, technical, and professional lines. The possession of a European language is recognized as essential for the intellectual development of the native. In the second place, Netherlands-India presents the same multiplicity of languages with which we are familiar in the Philippines. On the island of Java the population is divided into three native peoples, each speaking a distinct language—Sundanese, Javanese, and Madurese. On most of Sumatra Malay is the language of the people. Elsewhere the Lesser Sundas, the Moluccas, and Amboina have their special language, while Celebes has numerous languages. Through all of this territory, as well as in Borneo and the Sulu Archipelago, Malay, though not of the literary type, furnishes a lingua franca. But even this useful and widely spread language does not offer a satisfactory linguistic bond for the development of the peoples of the Indies. In the third place, I believe that Dutch statesmen have come to the deliberate conclusion that the diffusion of the Dutch language among the peoples of their great Empire will be a political factor of the highest value. Thus Holland has deliberately forsaken its previous policy of discouraging the native education in Dutch and upon this important matter of the dissemination of its own language is now associated in policy with America in the Philippines and France in Indo-China.

One of the other notable steps of the Dutch Government for elementary native education is of especial significance to us, because it resembles the emphasis which the American school system in the Philippines places upon the education of the peasant or rural population. In 1906 the Governor General, Lieut. Gen. Van Heutsz, outlined a plan for a new type of school, the "dessa school." The course is brief—three or four years—and in the local dialect. These schools are to be established in sufficient numbers to supply an elementary

[1] The course differs a little in the outer possessions, i. e., Sumatra, Amboina, Celebes, etc., and is detailed in a recent report of the department ("Voorschriften retreffende het Inlandsch Onderwijs," 1908, p. 385).

education to the entire native population of Netherlands-India. The thirty-odd millions of people who inhabit Java live in about 30,000 villages, known as "dessas" or "kampongs." They are so grouped that a third of this number of schools will place primary facilities within the reach of the entire population. Gov. Gen. Van Heutsz himself assured me that 10,000 dessa schools will be established on the island of Java alone. These schools are at present under the Department of the Interior, but will be transferred to the Department of Education. At the end of 1908, 367 "dessa" schools had been organized, and for 1909 410 additional schools were approved. The number will be increased with the utmost practical rapidity, not only in Java, but in the outer possessions as well.

The often-expressed arguments against such a plan as this—that the native will be trained away from industry; that he will be spoiled for toil; that he will be stimulated to unwise and dangerous ambitions—have certainly had full consideration from the Dutch and apparently they have been dismissed as theoretical and shortsighted. Gov. Gen. Van Heutsz in conversation expressed the conviction that has been felt in the Philippines—that until the rural population is taught to read, write, and keep accounts it will remain incapable of further advance.

NORMAL SCHOOLS FOR NATIVE TEACHERS.

It has already been stated that in the contraction of school work in 1884 the normal schools were reduced to four. These were at Bandoeng and Probolinggo in Java, Fort de Kock in Sumatra, and at Amboina. A fifth normal school was opened at Djokjakarta in 1897 and a sixth at Oenarang in the residency of Samarang in 1905. The course of study in these schools was at first four years, but in 1896 it was lengthened to six years, with the exception of Amboina, and at the same time the Dutch language was reintroduced. In these schools the Government furnishes free instruction to pupils and provides them with furnished rooms and an allowance of 10 guilders a month for food and clothing. The buildings of the normal school at Bandoeng, the only one I visited, are handsome and well constructed. They are arranged on the pavilion plan. The central building has recitation rooms, office, dining and social halls. It is flanked by houses for the director and for the second teacher, who reside at the school with their families. Behind and connected by covered porticos are the dormitories of pupils. Beautiful grounds surround the school.

A few years ago, in spite of the liberal terms of admission, it was somewhat difficult to maintain a full attendance at these schools; now they are crowded beyond their capacities, an indication of a change in native interest. Admission is by examination after the

boy has completed the lower-school course. The plan of studies impressed me as excellent. It embraces five years of Dutch from 5 to 18 hours weekly, five years of Malay and of another native language (Javanese, Sundanese, or Bugis), arithmetic, geometry, land measuring and surveying, including leveling and waterways; geography, history of Netherlands-India, natural sciences, including elementary physics and meteorology; plant and animal life, writing in Arabic, in Javanese, or other native characters, and in Roman letters, music, and very thorough work in drawing, which is pursued for five years. In the fourth and fifth years instruction is given in pedagogy and school administration; the sixth and last year is devoted to a general review and to practice teaching in a well-organized training school. Each normal school has five European instructors and two, three, or four native instructors, according to the number of native languages taught.

TRAINING SCHOOLS FOR NATIVE FUNCTIONARIES.

As is generally understood, the native royalty and aristocracy play an important part in the administration of the Indies. In the development of Dutch rule, the native sultans, princes, and chiefs of different degrees were gradually brought under control and into dependence on the Dutch Government and were required to aid the administration in its exploitation of the islands. For a long time the Dutch concerned themselves very little about the way these native chiefs ruled their subjects, provided they remained loyal and furnished the required contribution. Gradually, in recent decades, they have been moved to protect the native population against the rapacity and cruelty of their own rulers. A European administration was introduced, charged with the responsibility of insuring justice and well-being to the natives, and in this way the present Government received its character. For more than a generation the Dutch have been giving to the native population an undoubtedly equitable and most carefully conducted government. In the exercise of their surveillance over native chieftains they have worked out a truly remarkable system. It appears to be based upon two judgments of native character—first, that the natives to be content and obedient must be governed, or believe themselves to be governed, by rulers of their own race; second, these rulers, owing to a special peculiarity of Malay character, are content with the semblance of power, though deprived of its actuality. Dutch experience seems to justify the truth of these generalizations. Give the native the office, the title, the formal recognition, and he cares little if a higher but unobtrusive authority directs and controls him.

In fulfillment of these principles Java and most other parts of the Dutch Indies are divided into "regencies," which correspond

somewhat to former native states. At the head of each is a native "regent"—a prince or an aristocrat, appointed and removable by the Governor General. The regent has come to be simply a salaried officer of the Government. His orders are issued and his business conducted by a native minister, or "adipati." At the regent's side is the Dutch "resident," an officer of life-long experience in the Indies, popularly known as the "elder brother" of the regent. It is the resident who actually controls the administration in every detail. The regency itself is divided into districts, administered for the regents by a corps of native officers known as the "wedono," but these "wedono" are in all respects amenable to a highly trained corps of Dutch district officers known as "controleurs." These are the men whose business it is to see that the local government goes on efficiently and fairly; that agriculture is properly attended to; that local irrigation systems and roads are maintained; and that the relations between the native communities and Dutch planters are harmonious and helpful. The unit of administration is the little hamlet already referred to, known sometimes by the Malay word "kampong," but more often in Java by the name of "dessa." It is in large measure self-governed. The people in an open-air meeting, supervised by the "controleur," elect their headman, usually called the "loera."

These local headmen, as well as the various "mandoers" or overseers, are wholly or in large part uneducated natives, but "wedonos," "mantris," or subordinate officials, clerks, and accountants are, wherever possible, educated. The number of such native employees is large. As early as 1878 there were opened at Bandoeng, Magelang, and Probolinggo on Java, and at Tondano in northern Celebes, four schools for the sons of native chiefs and other well-to-do natives. These schools were called "Scholen voor de zonen van Inlandsche hoofden en andere aanzienlijke Inlanders," or "Hoofdenscholen." The course in these schools was originally four years. In 1893 they were reorganized, the course extended to five years, and instruction in Dutch was abandoned. Since that date the schools have been reorganized again; Dutch has been reintroduced as the principal subject and as the medium of instruction, and the name of all of them except the one at Tondano changed to "Training Schools for Native Functionaries" (Opleidingsscholen voor Inlandsche Ambternaren). Three additional such schools—at Serang (Bantam), at Madioen, and at Bliter, in Kediri—opened in October, 1910, each with accommodations for 140 pupils. In 1911, at Macassar, a training school with a normal department will be opened to train teachers and civil servants for Celebes and Borneo. Similar instruction is given at the normal school at Fort de Kock, Sumatra. The course of study is divided into three sections: A preparatory of two years, a first of three years, and a second of two years. The preparatory section has

been recently introduced in order to give the entering student a better preparation in the Dutch language than he receives in the first-class lower school from which he comes.

The subjects of study embrace the Dutch and Malay languages and the native language of the district in which the school is situated, geography, arithmetic, nature study, writing, grammar, history of Netherlands-India, and algebra. In the advanced section of the school the pupil studies jurisprudence, public and administrative law of the Indies, political economy, land surveying, waterways, line and map drawing. The instruction in jurisprudence is given in every instance by a doctor of laws of a European university.

I visited the "Opleidingsschool" at Bandoeng and was impressed by the excellence of buildings and equipment, the character and the enthusiasm of teachers, and the fine appearance and behavior of students. These young men are selected youths, coming of the best native families not only of Java but of the outer possessions. Among the students was the son of the deposed Sultan of Atjeh, who is kept in confinement on the island of Amboina. My impression was that these schools should produce a corps of native officials extremely well prepared for the duties of local administration, to which many of them will be assigned.

Under the present system they would hold only subordinate positions, in which their work would be subjected to the inspection of European officials, but some change in this matter is apparently contemplated. The present tendency seems to be to train the native for actual power, in place of that semblance of authority which the Dutch have ever carefully preserved. Much of this changed attitude is attributed, I believe, to the former counsellor for native affairs, Dr. Snoucke-Hurgronje. He was long an advocate not only of the intellectual powers of native Javanese or other Malayans, but of their reliability and trustworthiness. Due to his efforts, a plan was formulated by the former Gov. Gen. Rooseboom and accomplished under his successor, Gov. Gen. Van Heutsz, to train natives to be judges. A committee, consisting of Dr. Snoucke-Hurgronje, the procurator general, and Dr. Koster, the present director of education, framed the organization of a new training school for native magistrates, which was opened in July of 1909 at Batavia and is known as the "Opleidingsschool voor Inlandsche Rechtskundigen." Seventy-two pupils are admitted to this law school; the instructors are all Dutch doctors of law. The course promises to be thorough in all branches of law and administration. At the end of the course the graduate will take a public examination and will then be appointed to the position of "griffier," a sort of recorder or clerk to the president of a "landraad," or district court. The president of a landraad is at present always a Dutch doctor of laws. He alone determines the decision, but is

advised by a number of native assistants or assessors. The candidate, after a thorough training as a recorder of this court, will be advanced to the position of member of the landraad, vice president, and eventually to that of president—a position now held exclusively by Europeans.

THE "DOKTER DJAWA."

Another professional training school of note is the medical school at Batavia, commonly known as the "Dokter Djawa." This institution was founded in 1869 and its success up to 1900 is spoken of slightingly by M. Chailley-Bert. In 1902, however, it was reorganized, and its course extended to three years preparatory and six medical. It now has 150 students, to whom it appears to give a thoroughly modern course in medicine. These students have three years of dissecting, attend school clinics in which 4,000 patients are treated yearly, and in addition to thorough instruction in Dutch are given three years of German language. The chemical and pharmacological laboratories seem to be adequate. There are students in attendance not only of Java, but from Amboina, Borneo, and Sumatra. There are living accommodations and a very attractive clubroom in the institution. The graduating class in 1909 numbered 17; and I was assured by the director that the graduates encounter no difficulty in the practice of their profession and that many of them obtain positions as medical officers on plantations at monthly salaries ranging from 200 to 500 guilders.

In addition to the above schools there are various special schools in a number of places, of which little needs to be said here. Mention should be made, however, of the effort of the Dutch Government to establish industrial education. This important subject has not had as much success in the Dutch schools as it has in the Philippines, where industrial arts are pursued from the beinning of the primary course and where there are already a large number of well-equipped industrial schools. It seems more difficult in Java to familiarize the native with the purpose of these schools and to prevail upon the graduate to seek an independent practice of his trade. Students are inclined to look to the Government for employment and to expect an official position upon graduation. There is, however, a need of skilled native labor, especially in the machine shops of Surabaya and the railway shops at Bandoeng, where skilled workers obtain from 30 to 100 guilders a month. There have been decreed three trade schools ("Ambachtsscholen") for Surabaya, Samarang, and Batavia. That in Samarang was opened in October, 1910. It offers instruction in carpentry, masonry, blacksmithing, boiler making, wagon making, machine-shop practice, furniture making, tinsmithing, etc. The cost of establishing these schools is estimated at 100,000 guilders and the annual expense of conducting them at 37,000 guilders each.

AID TO PRIVATE SCHOOLS.

Grants-in-aid were limited originally to European higher schools and for a long time the Government preserved a strict neutrality on religious matters, giving its aid only to those schools which were supported by secular societies and taught no religion. In 1900, however, freedom of religious instruction in subsidized schools was allowed, since which date many new schools have been established by both Protestants and Roman Catholics. In 1905 grants-in-aid were extended to lower schools for natives, and in 1908 the States General of Holland enacted legislation of a still more liberal character, granting subsidies generally to schools established and maintained by missionary organizations. This step has not commanded entire approval either in Java or among legislators in Holland, but is due to the triumph in the Dutch States General of the Clerical Party, a combination of Protestant and Roman Catholic members, over the Liberal Party, whose educational program is secular.

The Dutch Government exercises inspection over these schools and they constitute a very important element in the education of the Indies.

The number of pupils instructed in private lower schools for natives is very large, more than twice that of public schools of the same class. Most of these private schools are supported by Protestant missionary societies and are in the outer possessions. The figures for lower schools in Java are 468 that are subsidized and 93 that are not subsidized; in the outer possessions, 257 subsidized and 891 not subsidized. These private schools have an attendance of over 30,000 in Java and nearly 50,000 pupils in the outer possessions, or about 80,000 out of a total of 190,000 pupils in both public and private lower native schools in Netherlands-India. The total number of teachers in lower native schools, both public and private, was 5,612 in 1907; of these, 1,382 were in public schools of Java and 1,465 in public schools in the outer possessions.

TERMS OF SERVICE FOR DUTCH TEACHERS.

The force of Dutch teachers for Netherlands-India is secured from Holland. There are opportunities for normal training for young Dutchmen in Java, but the attractions of commercial employment are too alluring, and the Government practically secures no teachers among them. As stated elsewhere, there are over a thousand Dutch teachers and the number is annually increasing. Ultimately the force will probably be at least 2,000. Most of these teachers are men, but there are women teachers for instruction in the schools exclusively for girls or admitting girls. The terms of service are liberal and attractive compared with the Philippines, yet I was assured by offi-

cials of the Department of Education that considerable difficulty is experienced in securing as large a number as is desired.

In the Philippine school service it has been the practice to appoint a large proportion of teachers from among university graduates with or without special pedagogical training and experience, but the Dutch force seems to be recruited entirely from those who have taken teachers' training courses in Holland.

The normal schools of Holland admit students who have completed the lower schools. The normal course is four years. Pupils receive from the Government an annuity of 300 guilders for their support. At the end of a four years' course they pass a State teacher's examination. Their education does not stop, however, with this examination. Two years later the "head master's" examination may be taken and also State secondary examinations to qualify for teaching a special subject, such as modern languages, higher mathematics, drawing, or engineering.

Teachers appointed for Netherlands-India are divided into three classes—first, second, and third—the first being highest. They are promoted for capacity and length of service. A male teacher holding a head master's certificate receives on original appointment 150 guilders ($60 gold) a month, with an allowance of 50 guilders ($20) for house rent. Even though he may not receive promotion to a second or first class position, he will receive an automatic increase of 50 guilders monthly at the end of each three years until he has been so increased six times. Normal-school teachers receive these increases every two years. Second-class teachers are appointed at 200 guilders, with 60 guilders a month for house rent, and increases of 50 guilders a month every three years. First-class teachers receive 250 guilders a month and 70 guilders allowance for lodgings, with similar increments of 50 guilders a month after each three years of service until they have received this advance six times. Thus at the end of 18 years the first-class Dutch teacher receives $220 (550 guilders) monthly and an allowance of $28 (70 guilders) for quarters. Women who are appointed to the position of third-class teacher receive 125 guilders, with 50 guilders for lodgings, but on promotion to the second or first class they receive the same compensation as men. Upon appointment each teacher is given a gratuity of 700 guilders for his outfit, and if he has a special certificate for teaching a modern language or other subject an additional gratuity of 100 guilders if he is a bachelor or 200 if he is a married man. This latter gratuity the teacher is expected to devote to his own insurance, the Government maintaining an insurance system for its employees. On disability or death the teacher of his family will receive an annuity of not more than 170 guilders a month, with additional sums for children. The children on the death of their mother will receive two-thirds of

the amount that she drew as the widow of a deceased employee. After 10 years of service teachers receive 1 year of furlough, with about one-half pay during the year. The Government bears all their traveling expenses from India to Holland and return, both on appointment and on furlough. If teachers are married and have children, the Government likewise bears the expenses of every member of the family. It will be seen from this that the contemplated period of service is 20 years, broken by 1 year of leave, although the probability is that this will shortly be increased to 1 year of leave in 7 years, making two periods of leave for the entire 20 years. After these 20 years of service the teacher may retire on one-fourth pay, with certain additions.

The above salaries do not include those which are paid to directors of normal and training schools nor the salaries of teachers in the higher schools, all of which are very much better. Teachers in the secondary schools receive an entrance salary of 450 guilders a month, which gradually increases to 750 guilders at the end of 12 years. Salaries of such teachers are raised also for certificates of proficiency in certain subjects, which include ethnology, native languages, surveying, higher mathematics, drawing, etc. For each certificate obtained by examination the teacher's salary is increased 50 guilders monthly.

Taking all of these facts into consideration, the teacher's compensation may be very good indeed. For example, I met a director of a normal school who receives a salary of 500 guilders ($200) a month, plus four increases due to two years' service each in the normal school, making an addition of 200 guilders, and 50 guilders each for certificates of competency to teach Sudanese and engineering, or a total monthly salary of 800 guilders ($320); besides this, he is furnished with a comfortable house of seven large rooms.

PUBLIC EXPENDITURES FOR SCHOOLS.

Under the strictly centralized system of administration which prevails in the Dutch Indies all taxes are turned into the general treasury and redistributed for local administration according to estimated needs. The expenditures in 1897 for public schools and private schools amounted to 1,255,630 guilders ($502,252), and in 1907 to 2,678,353 guilders, an increase of more than 100 per cent. The estimate for expenses of education during the year 1910 indicates a still greater development of school work and expenditure. The total estimated cost was 3,570,200 guilders ($1,428,080), divided between the following branches of instruction: For the support of public lower and special schools, for general education on Java and Madura and popular instruction in Atjeh, 2,438,000 guilders; for training schools for native officials

and sons of chiefs and for the training school for magistrates, 216,300 guilders; for normal schools, 219,500 guilders; for trade schools, 83,000 guilders; for administration, 143,600 guilders; for subsidies or grants in aid, 418,600 guilders; for miscellaneous expenditures, 51,200 guilders. Income from tuitions is estimated at 296,200 guilders, leaving a balance to be appropriated by the State of 3,274,000 guilders. The above figures do not include the cost of construction of new buildings, which, except for "dessa" schools, is borne by the State, and will amount in the next few years to very large sums annually.

CHAPTER XV.

RECENT EDUCATIONAL PROGRESS IN MEXICO.

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The educational history of Mexico forms one of the most remarkable chapters in the history of Latin civilization on the American Continent. In Mexico the Spanish conquerors adopted a more enlightened policy than in any other portion of the Spanish dominion. It is true of Mexico, as of the Argentine Republic, Chile, and Peru, that special attention was directed to higher education. Although primary instruction was almost totally neglected in the far southern countries, the Spanish authorities in Mexico showed some appreciation of the necessity of improving the condition of the native Indians. As early as 1532 the Spanish conquerors had made provision for primary instruction in Mexico City for 1,000 pupils. In 1553 the University of Mexico was opened, offering courses in theology, civil law, canon law, medicine, and the native languages. As in all the higher institutions of learning in the countries of Latin America, the University of Mexico was under the direct control of the Catholic Church, and remained so until the relation was abolished in the struggle between church and state in the sixties. With the confiscation of all ecclesiastical property, the university organization, which had gradually declined until it was hardly more than a mere shadow, disappeared.

The systematic development of public education entered upon a new era with the inauguration of President Juarez. Under the constitution of 1857 the Federal Government controls the system of primary education in the Federal District and in the organized territories, but it has no power over primary education within the States. At the time of the formation of the constitution, there was a movement to place the entire system of public instruction under the authority of the Federal Government. Sectional feeling at the time was so strong that it was not possible to secure the acceptance of this plan.

There is but little doubt that had the Federal Government been able to secure complete control of public education, the system would have made far greater advances during the last half century. This is due primarily to the fact that the revenues and credit of the

central Government are far in advance of those of the individual States. Furthermore, the fact that the States have failed to develop a distinctive and vigorous political life and that their administrative system is not thoroughly organized makes it difficult for them to secure the expert direction necessary for the growth of a vigorous system of public education.

The magnitude of the problem confronting the country can best be seen from an examination of the data relating to illiteracy. Significant as they are, it is likely that they underestimate rather than exaggerate the degree of illiteracy that prevails.

TABLE 1.—*Statistics of illiteracy in Mexico (census of 1900).*

Sections.	Persons 12 years of age or over who can neither read nor write.			Persons less than 12 years of age who can neither read nor write.		
	Male.	Female.	Total.	Male.	Female.	Total.
Central States	1,457,276	1,771,591	3,228,867	874,743	837,445	1,712,188
Northern States	245,021	250,555	495,576	186,938	176,849	363,787
Gulf States	398,532	465,619	864,151	306,718	284,638	591,356
Pacific Coast States	1,019,115	1,176,915	2,196,030	750,444	711,367	1,461,811
Total	3,119,944	3,664,680	6,784,624	2,118,843	2,010,299	4,129,142

Sections.	Persons concerning whom information could not be obtained.			Persons who can read and write.		
	Male.	Female.	Total.	Male.	Female.	Total.
Central States	57,861	67,598	125,459	601,147	401,545	1,002,692
Northern States	1,564	2,011	3,575	158,379	129,398	287,777
Gulf States	556	506	1,062	164,873	115,214	280,087
Pacific Coast States	16,457	19,449	35,906	348,926	260,106	609,032
Total	76,438	89,564	166,002	1,273,325	906,263	2,179,588

Sections.	Persons who can read but can not write.		
	Male.	Female.	Total.
Central States	78,368	91,464	169,832
Northern States	10,424	13,202	23,626
Gulf States	9,507	9,843	19,350
Pacific Coast States	65,269	69,826	135,095
Total	163,568	184,335	347,903

From these figures it will be seen that in the central group of States, with 6,239,038 inhabitants, but 1,002,692, or about 15 per cent of the total population, can read and write. In the northern group of States, with a population of 1,174,341, but 287,777 can read and write. In the five Gulf States, with a population of 1,756,006, but 280,087 can read and write, and in the States and Territories of the Pacific coast, of a total population of 4,437,874, but 609,032 can read and write. These figures are taken from the census of 1900. Un-

fortunately, no trustworthy statistics as to illiteracy are available which would enable us to measure the progress that has been made during the last 10 years. Some idea of the educational advance since 1874 may be obtained from the accompanying tables, which have been compiled from the official statistics gathered by the Federal Department of Public Instruction.

TABLE 2.—*Statistics of elementary schools, 1874–1907.*

Sections.	Total population.		Estimated school population.		Number of public primary schools.		Number of private primary schools.		Public and private primary schools.	
	1874	1900	1874	1900	1874	1907	1874	1907	1874	1907
Central States	4,539,940	6,239,038	907,986	1,247,904	3,336	4,800	1,160	1,116	4,496	5,916
Northern States	567,325	1,174,341	113,463	234,867	376	924	185	226	561	1,150
Gulf States	1,231,388	1,756,006	246,277	351,195	702	1,469	100	194	802	1,663
Pacific Coast States	3,004,217	4,444,988	600,963	891,997	1,575	2,517	694	694	2,269	3,211
Total	9,342,870	13,614,373	1,868,689	2,725,963	5,989	9,710	2,139	2,230	8,128	11,940
Federal District[1]	315,996	541,516	63,199	108,303	183	404	171	238	354	642
Territories (3)[2]	.....	204,836	.....	40,967	.....	193	.....	45	.....	248

Sections.	Enrollment.						Expenditures.	
	Public primary schools.		Private primary schools.		Public and private primary schools.		For public primary schools.	
	1874	1907	1874	1907	1874	1907	1874	1907
Central States	91,148	305,836	16,806	70,269	203,111	376,105	$465,368	$2,305,839
Northern States	18,832	74,763	3,626	14,118	22,458	88,881	70,456	598,391
Gulf States	27,758	87,502	2,312	13,615	33,670	101,117	42,648	561,914
Pacific Coast States	36,057	161,380	6,105	49,139	84,654	210,519	167,039	796,744
Total	173.795	629,481	28,849	147,141	343,893	776,622	[3]745,511	[4]4,262,888
Federal District[1]	12,607	51,555	8,053	12,285	20,660	63,840	83,650	1,319,691
Territories (3)[2]	.....	11,507	.....	3,115	.....	14,622	.....	114,117

[1] Under the central government, included above with the Central States.
[2] Under the central government, included above with the Pacific Coast States.
[3] Includes $81,245 expended for private schools.
[4] Includes $226,733 expended for private schools.

PRIMARY INSTRUCTION.

Although the Federal Government exercises no direct control over public education within the States of the Union, there exists throughout the Republic practical uniformity in organization.

Primary instruction includes five years of elementary grades and two years of advanced grades. The course of study in these schools has been carefully worked out, but the greatest obstacle in the way of efficient service is the failure to pay anything approaching adequate compensation to teachers. Even in the Federal District, where salaries are much higher than in the States, the principals of primary schools receive but $730 per annum. The compensation of teachers ranges from $328.50 to $547.50 per annum, depending upon the de-

gree of preparation and term of service. It is evident that with such low salaries teaching as a profession does not offer much to allure young men and women, and it is not surprising that the Government should find great difficulty in securing competent candidates for the available positions.

TRAINING FOR TEACHERS.

During the past few years a strong effort has been made in all the States, but especially in the Federal District, to improve the training schools for teachers. The improvement has been due in large part to the influence of the National Department of Public Education, and to the example set by the two excellent normal schools of the Federal District. The new building which has been erected for the Men's Normal School is thoroughly equipped and modern in every respect. In order to induce young men to enter the teaching profession the Government has provided liberally for scholarships and stipends. The Normal School for Women in the Federal District occupies an old building which is not adapted to its purposes. In spite of the inadequate accommodations, however, the school is doing excellent work, and compares favorably with most of the normal schools in the United States.

The course of study in the normal schools covers a period of five years and includes the following subjects:

First year.
Language
Arithmetic
Botany
Elements of zoology
Composition
Drawing
Manual training
Singing
Physical training and (for the men) military drill

Second year.
Language
Algebra
Geometry
Elements of physics
Elements of physiology and anatomy
Principles of hygiene
Drawing
Manual training
Physical education
Harmony

Third year.
Language
Elements of chemistry
Mineralogy
Elements of psychology
Geography

Third year—Continued.
Drawing
Manual training
Harmony
Physical education
Observation in the school of practice

Fourth year.
Spanish literature
Logic
Geography
History of Mexico
Pedagogy
Physical education
Observation and instruction in the school of practice

Fifth year.
Literature
Ethics
Civics
General history
Civic instruction
All the natural and physical sciences
Pedagogical organization
Discipline and administration
History of pedagogy
School hygiene
Physical education

MANUAL, TECHNICAL, AND VOCATIONAL TRAINING.

During the last 10 years the movement for the introduction of manual training into primary schools, both in the Federal District and in the States, has acquired considerable force. The late Minister of Public Instruction, Dr. Justo Sierra, as well as the Assistant Secretary, Dr. Ezequiel A. Chavez, saw clearly that the fundamental need of the great mass of the Indian population was the kind of training that would turn the attention of the younger men to the mechanic arts. Mexico lacks a native artisan class. The overcrowding of the legal and medical professions has become a serious problem in all the Latin-American countries, and is traceable to the continuance of the old Spanish prejudice against trade and commerce. This tendency has been strengthened by the purely dialectic character of the curriculum of the secondary schools, which are molded after the French system. The introduction of manual training, therefore, into the primary schools of the Federal District possessed a significance in Mexico far greater than in many other countries.

The influence of the change in the primary schools of the Federal District has been felt in all the States. Although but a beginning has been made in this direction, the important fact is that emphasis is now being laid on this type of training.

In the matter of vocational training, a beginning has been made in the Federal District, and also in some of the States, notably Chihuahua, but it is true that this movement is still in its infancy. In the Federal District there is an excellent trade school for boys and another for girls.

The school for boys prepares for the following trades: Carpentering, woodworking, ironwork, decorative painting and sculpture, electrical and industrial mechanics. For each of these, special courses are prescribed.

The School of Industrial Arts for Girls includes the following courses: Typewriting, bookkeeping, stenography, sewing, dressmaking, hat making, artificial-flower making, embroidery, lace making, wig making, hair-dressing, and domestic science. In addition there are a number of courses taken by all pupils in natural history, physics, and chemistry. In this school over a thousand pupils are registered. It is the purpose of the Federal authorities to increase the number of these schools as rapidly as the resources of the Government will permit.

COMMERCIAL EDUCATION.

The introduction of commercial education, especially in its higher grades, is another of the recent changes in the system of public education. The first step in this direction was taken through the introduction of commercial courses in the higher grades of the primary

schools of the Federal District. The next step was the establishment of a commercial section in the National Secondary School, and the final step in this movement was the establishment of a higher school of commercial education in the national capital. In the States but little has been done in this respect. Through the influence of the former governor of Chihuahua, the Hon. Enrique Creel, a commercial school was established in the capital of that State. If the plans formulated by Gov. Creel are carried out, this school will serve as a model for the other States for institutions of a similar character.

SECONDARY INSTRUCTION.

The instruction corresponding more or less closely to the high schools of our American system is given in the so-called "escuelas preparatorias" or preparatory schools. The organization, as well as the curriculum of these schools, is patterned after the French "Lycée" (modern course), and is designed to prepare students for the professional schools of the university. The system of secondary instruction is well organized in the Federal District, but constitutes the weakest link in the chain of education in most of the States. The most serious criticism to be made is the undue emphasis laid on examinations and the failure to keep in close touch with the work of the pupil during the course of the scholastic year. In every subject a series of printed questions is furnished the pupil, and in most cases his preparation consists in an attempt to memorize the answers to a disconnected series of questions, rather than to secure a broad grasp of any of the subjects. The result is that pupils pass through the "escuela preparatoria" with but a smattering of a great number of subjects, many of which are entirely beyond his mental grasp.

A serious attempt is now making to reduce the number of subjects taught and to require a more thorough training in a few fundamental courses. If this change is made it will constitute a marked improvement over the present system. The course of study covers a period of five years and includes the following subjects:

First year.
Algebra
Mathematics
Geometry
Spanish
French
Drawing
Manual training

Second year.
Advanced mathematics
Spanish
French
English
Drawing
Manual training

Third year.
Mechanics
Physics
Spanish
English
Drawing
Manual training

Fourth year.
Chemistry
Mineralogy
Botany
Geography
English literature
Spanish literature

Fifth year.	*Fifth year*—Continued.
Zoology	General history
Elements of anatomy and physiology	Mexican history
Psychology	Ethics
Logic	Spanish literature

HIGHER EDUCATION.

The movement for the establishment of a university in Mexico was initiated by Charles V in 1551, but no courses were offered until 1553. From that time until the final abolition of this institution by the Juarez Government in 1867, the only university organization existing in Mexico was under the direct control of the Catholic Church. As the demand for higher education, and especially for professional training, became more insistent the Government established a series of independent professional institutions. The medical school, the law school, and the engineering school grew up independently, each with its own director responsible to the Minister of Public Instruction.

This form of organization proved unsatisfactory for many reasons, but especially because it prevented the development of any unity of purpose in higher education and was a permanent obstacle to the growth of that university spirit which exerts so marked an influence on the life and thought of the student body.

The necessity for closer coordination of university instruction became so pressing that the Government finally decided to correlate the work of the several independent faculties in a university organization. The centennial anniversary of Mexican independence was made the occasion for the inauguration of this plan. Under the law of May 26, 1910, the existing schools of law, medicine, engineering, and architecture were made integral parts of the new National University of Mexico. To this a graduate school was added, intended for the conduct of special research in every field of science. The national preparatory school in the city of Mexico was also made an integral part of the new university organization.

The university is placed under the control of a president, designated as the "Rector," and a university council. This council is composed of the president of the university, the deans of the professional schools, and the director general of primary instruction. In addition, four members are designated by the Minister of Public Instruction and two representatives from each of the professional schools are elected by the respective faculties. The student body is also given representation on the university council by a provision which gives to the students in each of the professional schools the right to elect one of their number as their representative on the council. The council is given wide powers over university organiza-

tion and administration, but the final authority in all important questions is vested in the Minister of Public Instruction.

The official inauguration of the university took place on the 22d of September, 1910. It is, of course, too early to express any opinion on the operation of the new system. The results thus far attained, however, are sufficient to indicate the importance of the step that has been taken. A spirit of solidarity among the students, as well as in the teaching staff is rapidly developing. The cooperation that has been established between the various faculties is improving not only the content of the courses but also the spirit of university instruction.

PRESENT NEEDS OF THE EDUCATIONAL SYSTEM.

The experience of the last 25 years points clearly to the necessity of increasing the authority of the Federal Government in all matters relating to public education. It was generally supposed that the late Minister of Public Instruction, the Hon. Justo Sierra, would inaugurate a movement for the nationalization of primary and secondary education. His long experience, first as Assistant Secretary and then as Secretary of Public Instruction, had convinced him that the resources of the individual States were inadequate to meet the requirements of public education, especially in view of the alarming percentage of illiteracy that prevailed throughout the Republic. It is true that through a reorganization of the system of State taxation it would be possible greatly to increase the income available for educational purposes, but the political influence of the large-landed proprietors is so great that it is not likely that any considerable increase in the taxation of real estate will be made. Furthermore, owing in large part to the prevailing illiteracy, there is no well-organized public opinion within the States demanding an increase in educational facilities. Mexico needs a great national system of public education, organized, supervised, and directly controlled by the Federal Government.

In order to adapt any system of public education, whether State or National, to the needs of the country, it will be necessary to place greater emphasis on vocational and technical training. There has been a tendency to regard the Indian as incapable of industrial or mechanical efficiency. It is a notable fact, however, that wherever a serious attempt has been made at industrial training it has proved successful, at least to the extent of making of the Indian a fairly efficient artisan, and thus increasing his earning capacity. It is most important that the earning capacity of the mass of the Mexican population be raised as preliminary to the raising of the standard of life, and this can only be done through increasing their industrial efficiency.

The educational budget of the Federal Government for the year ending June 30, 1911, will give some idea of the scope of its activities.

Educational budget for the year ending June 30, 1911.

Administrative expenditures of the ministry of public instruction	$124,711.25
Primary schools in the Federal District	1,634,354.38
Primary schools in the northern section of Lower California	81,852.62
Primary schools in the central and southern sections of Lower California	85,268.38
Primary schools in the territory of Tepic	148,934.75
Primary schools in the territory of Quintana Roo	12,707.25
Kindergartens	30,853.88
Normal schools for men	85,725.00
Normal schools for women	85,690.87
National preparatory schools (high schools in Mexico City)	93,823.50
Law school	21,983.50
Medical school	88,657.25
Engineering school	57,411.75
School of Fine Arts	45,835.75
Graduate school of the university	40,000.00
National Conservatory of Music and Declamation	80,786.00
Higher School of Administration and Commerce	41,623.87
National Trade School for Men	50,578.13
National Trade School for Women	47,400.20
National Pathological Institute	18,277.62
National Bacteriological Institute	24,074.25
National Medical Institute	32,741.63
National Museum of Natural History	21,103.25
National Museum of Archæology, History, and Ethnology	59,718.00
Archæological excavations and preservation of the results of such excavations	48,700.25
National Library	32,126.20
Romeo Rubio Library	338.95
Contingent expenditures for public instruction	389,750.00
Total	3,485,028.48

The first effect of the political and social upheaval consequent upon the recent revolutionary movement has been a disorganization of the system of public instruction throughout the country, both in its lower and higher grades. The complete change of administrative personnel has involved the dismissal of many teachers and has led to the growth of a feeling of uncertainty on the part of those now holding positions in the public schools. It is true that both President Madero and the members of his cabinet have expressed their determination to concentrate effort on public instruction, but as yet no definite plans have been formulated to effect this purpose.

CHAPTER XVI.

EDUCATION IN PERU.

By J. A. MacKnight,

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GEOGRAPHICAL AND SOCIOLOGICAL CONDITIONS.

In order to understand the educational situation in Peru it is necessary to take into account certain physical and sociological conditions, such as the sharp contrasts in physical features, resulting in an extremely variable climate, and a strange mingling of races giving rise to certain pronounced ethnical and social characteristics.

Peru extends from within 2° of the equator to nearly 20° south latitude, or a distance equal to that from New York to St. Louis. This fact in itself would tend to produce great variation of climate, a condition which is complicated by the further fact that the country is divided by the narrow and high Andean cordillera into three well-marked parallel regions: The coast, the sierra, and the montaña. The first is from 10 to 50 miles wide and has a warm climate throughout the entire length of the State; from June to September, the winter season, one rarely sees the sun, and the continual "Scotch mist" amounts at times almost to a light shower; in the remaining months it is rather hot and without rain. The sierra embraces a region from 50 to 200 miles wide, is very high, and has a bracing but not intensely cold climate, which varies but slightly throughout the year. The montaña is the eastern slope of the mountains, rich in vegetable and mineral products, but inhabited mostly by half-civilized Indians, and in very few places have attempts been made to establish schools.

The climatic conditions are not more variable than the races of the country. The monthly school report calls for racial data under the following heads: Whites, Indians, mestizos, and negroes. The whites, chiefly of Spanish descent with a sprinkling of foreigners, are found principally in the coast region, the Indians and mestizos in the sierra and the montaña, and the negroes in the north, but one meets with a goodly number of all three races in every part of the country. It is worth noting that, except in the case of very well-marked types, the classification according to race is a rather arbitrary matter, so

that two equally well-informed teachers might easily classify many of the same pupils of a school differently.

Whether due to the climatic conditions or the intermingling of races, or both, one is soon impressed with certain national characteristics which are so deeply ingrained that it is necessary to keep them well in mind in order to understand the attitude of the people toward public education. It must not be supposed that these traits are to be found only among Peruvians.

European education was introduced into Peru as in other Spanish colonies by ecclesiastics and the teaching orders of the Roman Catholic Church who followed in the wake of the Spanish conquerors. Until the eighteenth century the Jesuits practically controlled the work and were active in maintaining missions among the native population.

The University of San Marcos, "the oldest on the Western Continent," was established in Lima by papal bull in 1571 and confirmed by royal decree the following year; that of Cuzco in like manner in 1692. Besides these higher institutions, which still exist, the religious orders maintained nine colleges for the education of their novitiates.

THE MODERN PERIOD.

With the declaration of independence in 1821 came the provision of a free public school in the capital of each Department, the religious orders being obliged at the same time to maintain one such school for the education of the poor of each parish. In 1822 a normal school was established in Lima on the Lancasterian plan, and three years later one was ordered established on the same basis in the capital of each Department. In 1823 it was declared that the Republic owed free education to everybody, and a Central Bureau of Education was established with the purpose of administering the schools to that end.

In Lima in 1833 four schools were established for each sex, on Lancasterian lines. The course of study embraced reading, writing, arithmetic, grammar, and religion, with instruction in sewing for the girls.

Some idea of the character of secondary education of that time may be gathered from the curriculum of the college of San Carlos, one of the principal secondary schools of Lima, which was as follows: Ideology and moral philosophy, Latin and Spanish literatures, pure mathematics, applied mathematics and physics, geography, chronology, history (general and natural), agriculture, chemistry, mineralogy, natural rights and those of nations, legal rights and procedures according to Roman and national law, political economy and diplomacy, canonical laws and ecclesiastical history, English and French languages, and drawing.

The normal schools having fallen into decline, two were reestablished in Lima in 1836. The Universities of Trujillo and Arequipa were founded in 1824 and 1835, respectively.

The period from 1821 to 1907 was marked by successive changes in the system of administration with little steady progress in the actual work of education. The most decisive forward movement began in 1904 under the administration of Don Jose Pardo. The complete reorganization of the school system was provided by the law of December 5, 1905, and in March, 1910, the administration of the three grades of instruction, primary, secondary, and higher, was consolidated and placed in charge of the Central Directorate of Public Education. The National Council of Education was revived in 1907 and was constituted as follows:

The minister as presiding officer, the director general of public education, the rector of the University of San Carlos, of Lima, a delegate elected by each of the faculties of this university, the director of the National College of Guadaloupe, of Lima, the director of the Men's Normal School, the three directors of the Schools of Engineering, Agriculture, and Arts and Trades, respectively, and a delegate named by the private schools. This council, which works through its respective committees, has the right of initiative in all school matters

THE PRESENT ORGANIZATION OF THE SCHOOLS.

The present highly centralized system of school administration in Peru follows very closely the political organization, and depends very largely for its successful operation upon the efficiency and impartiality of the political authorities. The Republic of Peru is divided into 19 Departments and 2 constitutional Provinces. These Departments are the centers of political administration, the highest authority in each being the prefect, who is appointed by the executive; the Departments are divided into from 2 to 10 Provinces, over each of which is a subprefect, and the Provinces are in turn divided into districts, usually corresponding to the towns and villages, over each of which is a gobernador (governor). Besides this hierarchy of national authorities there is a municipal organization in each city.

For school purposes there is a similar hierarchy of administrative officials: The highest school authority in the Department is the departmental inspector, who is at the same time inspector of the Province in which the capital of the Department is situated; under him are the provincial inspectors of the remaining Provinces; below these are the district inspectors, who look after the several schools of their respective districts. In general, these inspectors are responsible to the Central Directorate of Public Instruction, as are also the directors of the secondary schools and universities.

The Central Directorate of Public Instruction, at the head of which stands the Director General, is charged with the administration of the educational institutions of the country, subject to the "reglamento" (regulations) and the directions of the minister and the national council. Its work is divided into five sections, as follows: Primary education, secondary and higher instruction, statistics, supplies, and properties and incomes. This directorate exercises only administrative functions, operating through the inspectors of primary schools and the directors of the middle and higher schools. Each grade of instruction has its own "reglamento" and course of study.

PRIMARY EDUCATION.

Organization.—According to article 24 of the Constitution, the State guarantees the maintenance and diffusion of free primary education, and by the same article makes it compulsory. In practice, only the first two years are compulsory, although primary education comprises five years of study; this is divided into two grades of two and three years, respectively, so that the first grade only is compulsory. Instruction of the second grade, which is optional, is offered only in central schools (centros escolares), which exist in the capitals of all Provinces and in some of the other more important towns. The reglamento provides for at least a mixed school in all plantations, mining settlements, and villages of less than 200 inhabitants; those of more than 200 are entitled to a central school. Unfortunately the funds available have not permitted the fulfillment of this provision in many cases; by a supreme order of March, 1908, all schools in operation the year previous with an average attendance of less than 15 were closed.

In general, the schools are separated according to sex, though in spite of the widespread prejudice against mixed schools a number of separate schools were converted into mixed schools at the beginning of the present year, chiefly for economical reasons. The relation of the sexes here is not very different from what one finds in southern Europe, and on account of the fears and prejudices of parents a "mixed school" is very rarely coeducational in fact; for in most communities the sex that happens to predominate will attend, the other remaining at home; generally this is the lot of the girls. Even when both sexes attend, they are seated in different rooms and are instructed separately. Although the school age is from 6 to 12 for girls and 6 to 14 for boys, mixed schools can not legally receive boys over 10 years of age or girls of more than 12; still in many "mixed schools" where one sex is crowded out pupils are found over 15 years of age.

The principals of boys' schools are always men, though women teachers are frequently employed in the grades, while only women may

have charge of or teach in mixed schools. Outside the larger cities not much interest has been awakened in the education of the girls, and it is no unusual thing to find, even in towns of from five to ten thousand inhabitants, no public provision whatever for the education of girls after completing the primary school.

The "reglamento" provides for infant schools, or kindergartens, in the capitals of Provinces, but so far they have been organized in not more than a half dozen of the larger cities. They admit children from 4 to 6 years of age, who receive attention and instruction according to the principles of Fröbel.

School support.—Unfortunately no permanent funds have been set apart for the support of primary education, although the Government still has numerous tracts of land in almost every Department that could be applied to that end. The organic law declares that 5 per cent of the national revenues, 30 per cent of the departmental revenues, and all the excises placed on liquors shall be devoted to the maintenance of primary schools. On the whole this arrangement has not provided sufficient funds, but this may be due to the failure to collect and turn over all these funds. In any case the question of adequate school funds constitutes one of the problems of the proposed reorganization of the system.

The total receipts were as follows:

1906	$1,115,785
1907	1,158,590
1908	1,309,090
1909 (estimated)	1,400,000

The course of study.—Although primary education comprises according to law but five years—two grades of two and three years, respectively—in practice it amounts to six years at least, since it is the custom to have a "complete" and an "incomplete" section in the first year of the first grade. Not infrequently the kindergarten as it is conducted is nothing else than a first year of school work.

In the first grade the chief stress is naturally laid on the three R's, the exact prescription being, for the first year, reading, writing, arithmetic, nature study, and religion (recitation of the catechism); in the second year, the same with elementary geography and the history of Peru, while moral instruction takes the place of religion. The second grade, comprising the third, fourth, and fifth years of instruction, continues these subjects, taking up besides in the third year Spanish, physics, chemistry, natural history, manual training (consisting of handwork with inventive geometry and drawing), music, physical exercises and hygiene; nature study being superseded by elementary agriculture and arboriculture; the moral instruction consists of the Christian dogma and sacred history and social duties. In

the fourth year horticulture and drawing from nature are added to the preceding subjects, while the manual training begins to differentiate according to the sex of pupils, the girls taking up weaving, sewing, embroidering, and laundering, while the boys have elementary work in carpentering, blacksmithing, tailoring, shoemaking, and printing, according to the trades most in demand in the community. The fifth year is a continuation on the lines of the fourth, civic education taking the place of moral and religious instruction.

It will be recognized that this course as it appears in print leaves little to be desired, but in practice there are few schools that carry it out at all satisfactorily. The chief reason for this is that so few of the teachers are prepared to teach all these subjects, supplying the material and adapting it to the needs of the class (there are no good textbooks), so that many teach only the common branches and those not infrequently in the most indifferent manner. Again, it must be said that the course, as it is printed, is so condensed and abstractly presented, consisting of the barest outlines, that it is of very little help to the teachers, very few of them being able to elaborate the topics indicated.

Although it is prohibited by the reglamento to teach reading by the letter and syllable methods, it is safe to say that in four-fifths of the schools these are the methods employed. It is also declared that arithmetic shall be taught by the objective method, but relatively few of the teachers really know what the objective method is and fewer still actually employ it successfully in their schools. All of which only shows that a competent person can soon make an excellent course of study, but it takes time to secure a body of teachers capable of making it a reality in the schools.

Schoolhouses and supplies.—Public education is declared to be not only compulsory but free; the Government provides the schoolhouse and furniture and furnishes free of cost to the pupils of the first two years (the compulsory period) textbooks, pencils, tablets, pens, etc. This fact, together with the aim of the Government to provide a home for each teacher holding a permanent appointment, a gradual increase of salary, and retirement with a pension after 20 years of service, indicates something of the scope of the reforms initiated by the former President Pardo in 1905. Owing to the lean years through which the Government is now passing, it has not been possible to fulfill to the letter all these aims.

By a certain interpretation of the Organic Law of 1905, the schoolhouses provided by the municipalities during the period of decentralization preceding were to become the property of the Government, to be used for school purposes; yet in many towns the municipalities refuse to surrender the buildings, though generally permitting

their use by the schools. Unfortunately this matter has not been finally determined with the promptness its importance demands.

Of the 1908 school buildings in use in 1909, 550 belonged to the Government and were valued at $410,199. Many buildings belonging to the Government and formerly used as prisons or barracks have been converted into schoolhouses, and too often without those modifications necessary to render them suitable for such purpose. The new buildings that have been constructed in Lima and Callao are models in arrangement and sanitary conditions, and it is regrettable that more such buildings have not been constructed in all parts of the country. Owing to the straitened financial conditions all building has for the present ceased, and even the securing of suitable sites, which are fast doubling in value. The following table will be of interest as showing the amount spent in the construction and rent of schoolhouses:

TABLE I.

	1906	1907	1908	1909
Construction and repair of buildings	$101,090	$56,916	$48,942	[1] $30,000
Rent paid for school buildings	47,358	66,258	85,825	100,000

[1] Estimated.

In renting buildings the Government has unfortunately been obliged to sanction the use of a great many that are entirely unfitted for school purposes. In harmony with the recommendations of the Congress of Health and Hygiene, which met in Lima in 1899, the reglamento prescribes modern requirements as to the ventilation, lighting, and sanitation of schoolrooms, but, like numerous other excellent prescriptions, they have been realized in so few schools that the reglamento represents a goal toward which the education of the country is tending rather than a reality achieved.

In the Department of Puno, situated in the sierra on Lake Titicaca, where the writer is familiar with conditions, there are 98 schools in session; of these, not more than 12 are in Government buildings, and a smaller number still possess the sanitary conditions required by the reglamento. In the rural schools, where nearly all the pupils are Indians or mestizos, it is no uncommon thing to find the one-room adobe building so small that the pupils do not pretend to enter, but study and recite in the open air. * * *

To sum up, not one of these 98 buildings was constructed for school purposes, not over 10 have water-closets, and only a slightly larger number meet the commonest hygienic conditions demanded by the reglamento. Practically all are constructed of adobe and have dirt floors, a few being provided with tiling or wooden floors. There are a few with sheet-iron roofs, and a considerable number with tiling,

while a great majority are covered with straw. There is no means of heating the buildings, as is the case in private houses also, the need not being very great, while the expense would be very high on account of the scarcity of fuel.

In point of school furniture, maps, and other material, the schools are fairly well provided; at least a sufficient supply has been purchased by the central directorate, though often, on account of the negligence of local inspectors, the articles fail to reach their destination until years have passed, or never. In the last four years the following sums have been spent in purchasing and keeping in repair school material: 1906, $117,750; 1907, $66,530; 1908, $99,485; 1909, $100,000 (estimated). * * *

Statistics of attendance, etc.—There can be no doubt that in many respects decided improvements have resulted from the régime of centralization inaugurated five years ago, while at the same time difficulties almost insurmountable have been met, especially on account of the distance of many districts from Lima and the time lost in communicating with the central directorate. The following table, based upon the reports of the department of statistics, reveals the most important facts of the new movement in education during the last five years:

TABLE II.

	1905	1906	1907	1908	1909
Schools	1,425	2,157	2,262	2,339	2,159
Teachers	1,657	2,768	2,944	3,105	2,909
Pupils enrolled	85,000	148,241	156,011	162,298	153,901
Average attendance		73,086	85,081	89,009	84,408
Pupils examined		86,771	93,106	98,920	88,043
Pupils promoted		80,011	85,220	90,031	80,890
Completing the first 2 years (compulsory period)		8,375	9,549	11,220	11,177
Completing elementary education, 5 years		278	268	394	511
Pupils who learned to read		42,903	48,343	45,915	38,771
Pupils who learned to write		36,499	43,571	42,950	37,407

The distribution of the pupils of the elementary schools according to sex, age, race, and grade for the year 1909 was as follows: Boys, 98,445; girls, 55,456; less than 6 years of age (both sexes), 5,489; between 6 and 14, 140,767; over 14 years of age, 7,645; white, 29,540; Indians, 50,959; mestizos, 78,720; negroes, 1,682. In the first grade (the first two years, the compulsory period), 146,461; in the second grade (the last three years of primary instruction), 7,440.

There are many private schools, especially in the larger cities, of kindergarten, primary, and secondary grades. The number of pupils enrolled in such schools during the year 1909 was 24,202.

Compulsory education.—For various reasons, chief among which is the predominance of the Indian element, the compulsory school law has remained almost a dead letter in Peru. In the first place, the enforcement of such a law requires an annual register or census of

children of school age as a working basis for teachers and school authorities. Such a census has not been taken since 1902, so that the registration of school children from year to year has been far from complete. There being no systematic effort to enforce attendance, the number who have voluntarily received the elements of an education is small indeed, in many of the better towns not exceeding 30 per cent of the children of school age.

In the mountain districts, where the Indians constitute almost the entire population, conditions are worse still. The sowing and harvesting seasons, as they are managed, extend over months, so that the one furnishes an excuse for not sending the children during the summer semester and the other during the winter term. Taking into account that their scanty living depends entirely on the crops raised, it is almost impossible to enforce the fines the law provides. In other parts, where they could with greater justice be imposed, the political authorities on whom this depends fail in their duties and the inspector who insists on the enforcement of the law is in a fair way to get himself thoroughly disliked.

The last school census, taken in 1902, showed 351,484 children of school age, or about one-half what it should have been, calculating the total population at 4,000,000, as it is claimed (no general census has been taken since 1872). Of these 351,484 children, in 1906, 135,480 were enrolled in Government and 22,824 in private schools, or, together, 45 per cent of the school population. By the preceding table the average attendance is seen to be about one-half the enrollment, so that not over 23 per cent of the children of school age are actually in school.

Teachers, certificates, salaries, etc.—Teachers are of three classes, according to the manner of appointment; that is, whether appointed by the provincial inspector, by the prefect of the Department from a list of three proposed by such inspector, or by the minister in Lima. The first class of appointment is temporary, the teachers being subject to removal or transfer at the will of the inspector; only the minister can remove or transfer a teacher of the second class, while those of the third class receive their appointments as the result of a competitive examination or on the basis of successful experience, and hold their position for life or until they are retired, except for flagrant misconduct. * * *

Anyone who can read, write, and cipher a little may be appointed teacher of an elementary school, and not infrequently it is charged that the majority of the teachers of some remote Province are entirely illiterate, such a charge having just been made in the Congress against the teachers of the province of which the present minister of education is at the same time senator. Through the country, and especially in the interior, persons competent to teach are scarce, and at

times it is impossible to find such at all. The chief reason is the backwardness of education in general and the low salaries paid. During the years 1906, 1907, and 1908 the average salaries were $234, $235, $237, respectively; the few graduates of the men's normal school get $600 a year, those of the women's normal schools from $270 to $480. Living expenses are about the same as in the United States, while imported articles cost nearly double what they do there. Under these conditions it is no great wonder that teaching is so little attractive to promising young men and women, most of the former entering the legal and medical professions in constantly increasing numbers.

There are three grades of teachers' certificates or diplomas, as they are called, but the majority of teachers are without certificates of any kind. The following data, taken from an article recently published by the head of the department of statistics, are to the point: "If we examine the conditions of the teachers of our schools, we see that according to the statistics of 1906, of the 2,768 in service in that year, 331 held certificates permitting them to teach in the first two years of elementary school and 736 were certificated for teaching in the next three years, 37 with university diplomas, and 1,674 without any certificate at all, or 60 per cent of the whole number."

The examination for teacher's diploma is held by the departmental inspector, applicants being required to present certificates of having completed the primary school. In this work the inspector is assisted by two of the foremost teachers of the departmental capital. The examination consists of two parts, written and oral, the latter being based on the common branches, while in the first part the applicant writes on a topic related to teaching. It not infrequently happens that on account of the incompetence of the examiners, or of favoritism, candidates are passed who really know very little of the subjects they propose to teach and less of correct methods. However, under the present régime the written work of the applicant is revised in Lima, which gives a certain uniformity and standard before unknown. All certificates are granted by the minister and without term limit. * * *

One of the reforms most urgently needed is in the certification and appointment of teachers in such a way as to discover and reward merit and stimulate all to improve themselves constantly and devote themselves exclusively to teaching. In the secondary schools the great majority of the teachers are lawyers, whose interests are not in teaching, but who are obliged to do that or something else in order to live while they are awaiting a clientele. It is needless to suggest how unsatisfactory the results of such a practice must be.

According to the law of 1905, any teacher who holds his school by permanent appointment, after serving 20 years, may be retired on

half pay, provided that during that period he has contributed to the pension fund 4 per cent of his salary, which must be at least $25 a month.

Inspection of schools.—Provincial inspectors are appointed by the minister, the inspector of the Province in which the capital of the Department is located being ipso facto departmental inspector. By an official order last March, the number of inspectors was diminished from more than 100 to 60, so that now nearly all have two or three Provinces each; at the same time the number of obligatory annual visits to each school was increased from two to three, which, considering the distances to be covered in the mountain section, is a physical impossibility or leaves no time for other work which is no less exacting.

The chief duties of inspectors are appointing provincial teachers, supervising the instruction in the schools, setting the dates of the semiannual examinations, making up the annual budget which must be sent to Lima for final modification and approval, and presenting a detailed review once a year of the state of education in his dependency. * * *

Without diminishing the importance and need of a thorough reorganization of the administrative system in harmony with the lessons learned by the experience of other countries and of ample provision of school funds, * * * it must be admitted that a fundamental need of the school system, and one that can not be quickly or easily supplied, is a body of competent and devoted teachers, together with a similar corps of inspectors or supervisors.

NORMAL SCHOOLS.

There are three normal schools in the country: One for each sex in Lima and one for women in Arequipa. The Men's Normal of Lima has a two-years course, admits only pupils from 18 to 22 years of age who have finished secondary education; last year there were only 42 students enrolled and only 11 were graduated. There is also a preparatory section. The Women's Normal of Lima has a three-year course and a preparatory section; the enrollment last year was 100 students, and the number finishing the course, 12. The Women's Normal in Arequipa has a two-year course with a preparatory section; the enrollment the past year was 89 and the number of graduates 16. By way of summary, the whole number of graduates last year was 39, only slightly more than the number of teachers employed. At this rate, granting that the number of teachers in the country, about 3,000, would not increase, it would take three-quarters of a century to supply normal graduates as teachers. There is an outspoken feeling that the number of graduates of these schools is not commensurate with their cost of maintenance, especially with refer-

ence to the Men's Normal in Lima. Both normals in Lima are boarding schools, the Government paying practically all living expenses of pupils in the Men's Normal, by means of competitive scholarships.

The director of the Men's Normal in Lima and the directress of the normal in Arequipa are Belgians, are very competent, and have performed valuable service to the country. The director of the former school has just resigned in order to return home.[1]

TEACHERS' INSTITUTE.

The writer, who spent one year as inspector of schools of the Department of Puno, was soon convinced as a result of visits to the schools that the only way to reach the teachers and improve their work was to get them together during the vacation and give them a series of lectures on teaching, along with model lessons. A plan was presented to the minister of education and approved, and the first teachers' institute in Peru was held in Puno, on the shore of Lake Titicaca in March, 1910. The attendance of teachers was voluntary, yet out of 102, 57 were enrolled, although some of them came over 100 miles on horseback, paying all their expenses, and on a salary of $15 a month. * * *

I was informed by a number of persons that the institute would amount to nothing, that the few teachers who might come the first day would hardly return the next, and even the Directorate in Lima was very reluctant in approving such an unheard of venture, and in the end did so with certain limitations. But the institute proved a great success from the first day, the attendance increasing along with the enthusiasm until the last day, closing with a demonstration of entire satisfaction, and the desire was unanimous that another be held in the following vacation. The method of teaching reading by letters and syllables was completely routed in that six days' work, the advantages of the sentence word method being demonstrated to the satisfaction of all. Naturally it devolved upon the writer to prepare a series of reading lessons suited to the new method, which in company with one of the leading normal graduates, was done; these lessons with copious instructions—for the change of method was like that of the Ptolemaic for the Copernican system of astronomy—were printed and sent regularly to the teachers of the Department. The results, considering the absolute lack of professional preparation on the part of many of the teachers, were far more satisfactory than I thought possible to achieve in so short a time, thanks to the good will and determination of the teachers to follow instructions faithfully. * * *

[1] The writer of this article was subsequently made director of the men's normal school.—EDITOR.

The idea has found such acceptance with the authorities that at least three institutes will be held in the leading departments in the following summer vacation, which occurs in January and February. Doubtless some means will be found to reward or compel attendance, which could be done with justice, since teachers receive their salaries during the vacation months.

SECONDARY, HIGH, AND SPECIAL EDUCATION.

Pupils who finish the five years of elementary education are prepared to enter the four-year course of intermediate education, which corresponds somewhat closely to our high school course, though pupils enter one or two years younger.

This education is carried on in 27 Government schools called "Colegios," 3 of which are for girls exclusively, located in Cuzco, Trujillo, and Ayucucho, respectively. Only recently the others may admit young ladies, but so far it is safe to say that not over 1 per cent of the students are girls, so strong is the prejudice against coeducation in any form. The number of teachers in these secondary schools for last year (1909) was 551, and the number of pupils enrolled was 3,872.

The course of study is uniform throughout the country. It provides 25 recitation periods a week, besides three additional hours of physical drill during the last year. The first year (for pupils from 12 to 13 years of age) comprises the following subjects: Spanish, geography, fundamentals of dogma, English or French, arithmetic, penmanship, general history, zoology, drawing and music.

The second year is the same except that the five weekly periods for mathematics are distributed in the proportion of one, two, and two among arithmetic, algebra, and geometry, while botany takes the place of zoology.

In the third year the four hours of mathematics are divided equally between algebra and geometry, while in place of botany, mineralogy and geology receive two hours, physics three hours, and chemistry three hours with one hour of laboratory work.

In the fourth year (students from 15 to 16 years of age) the mathematics consists of trigonometry and surveying; anatomy and physiology take the place of geology and mineralogy; physics and chemistry continue with reduced periods, while five hours of philosophy and one of civics are added. The only option is between English and French, to which three weekly periods are devoted in each of the first three years and two periods the last year.

On the whole the subjects are well outlined in the course, but the number of subjects is obviously excessive.

Of universities there are four: San Marcos, in Lima;[1] San Antonio Abad, in Cuzco; San Augustin, in Arequipa; and San Thomas and Santa Rosa, in Trujillo. The first is called a major university, the rest minor. In all four there were in 1909, professors, 149; students, 1,088.

At the end of three years' study one may receive the A. B. degree; the faculties represented in the University of Lima and the number of years required for graduation are as follows: Medicine, 7 years; pharmacy, 3; theology, 6; law, 5; political sciences, 3; philosophy and letters, 3; and mathematics and natural sciences, 3. In the Universities of Arequipa and Cuzco there are faculties of law, political science, letters, and natural science; in that of Trujillo, only letters and law.

The middle schools are supported by national and departmental subsidies, income from their properties, and tuition of the pupils, the last source furnishing about 25 per cent of the entire income, which in 1907 amounted to $271,675; in 1908 to $306,220. The universities are supported by national subsidies, incomes from their properties, and the tuition of students, which latter item amounts in Lima to 10 per cent of all incomes; in Arequipa to 15 per cent; in Cuzco to 25 per cent; and in Trujillo to 30 per cent. The latest total income reported for the universities was for the year 1906, the amount being $179,820.

The special schools are those of arts and trades, engineering, and agriculture and veterinary science, all of which are located in Lima. The first comprises the furniture and carpet trades, mechanics, electricity, city and industrial constructions, and the graphic arts. The school of engineering has a preparatory section of two years, followed by others of different length, as constructions, two years; mines, three years; industries, three years; and electricity, one year. The school of agriculture and veterinary science has a preparatory section of one year, followed by another and special section of three years. These schools are not subject to the minister of education but to the minister of propagandas.

FOREIGN TEACHERS IN PERU.

South American countries have long been accustomed to employ foreign teachers, chiefly with the hope of overcoming the inherent inertia of the races. Chile owes much to the influence of a number of German teachers whom she has maintained at the head of

[1] A recent report from Mr. W. Henry Robertson, American consul general at Callao, includes the following: "The few lectures given during the past year by Prof. Felipe Barreda Laos, of the faculty of letters of the University of San Marcos of Lima, on the literature of the United States, proved so popular that the university faculty have just voted that he give a regular, prescribed course of instruction on this subject in the ensuing scholastic year. This is said to be the first time such a course has been made a part of the curriculum of a South American university."—Ed.

her educational institutions; likewise Argentina owes much of her educational glory to a band of American teachers brought down a little more than a generation ago. For more than 40 years Peru has employed in a number of her middle schools, German teachers, who have rendered excellent service. At the present time two of her three normal schools are in charge of Belgian directors, as is also the Agricultural School. There are also a number of Frenchmen in teaching positions under the Government, while the director of the principal secondary school of the country is a Swiss.

About three years ago some of the educational leaders of the country began to turn their gaze toward the Grand Republic of the North, as the United States is frequently called, believing firmly that the type of education so rapidly developed there in recent years was what was needed to put new life blood into the anemic school system of Peru. At first a lady inspector was employed for the girls' schools of Lima and Callao, Miss Grace Carnahan, of St. Louis. Miss Carnahan is a young woman of ability and energy, who had served in Porto Rico and knew Spanish; consequently from the start her work was very successful and rightly appreciated.

In May, 1909, the Peruvian Government sent a special educational agent to the United States to engage a number of teachers and inspectors, as also a specialist in educational administration. For this post Dr. H. E. Bard, who had seen service in the Philippines, was selected; and Mr. J. B. Lockey, of Florida, and the writer, then students in Teachers' College, New York, were employed as inspectors. Shortly afterwards three young women were engaged for teaching positions; for various reasons these have since returned to the "States." Dr. Bard, who was consulting expert to the minister of education, had also acted as inspector of the boys' schools of Lima and Callao. He was relieved of the latter function in July last in order that he might devote all his time to the study of the educational situation of the country. He was made secretary of a special educational commission, appointed last May, to prepare a bill for submission to the next Congress which shall have for its object the reorganization of the school system. Mr. Lockey, who had served as inspector in Trujillo, was called to Lima as departmental inspector.

Whether the American educational mission will meet expectations fully remains yet to be seen, as much of the year and a half that has elapsed has been necessary to learn the language and get acquainted with conditions. In spite of the difficulties to be overcome and the immense amount of work that is to be done, there is every reason to be encouraged. From the President of the Republic down to the last teacher or district inspector, there is the best of good will for our undertaking and a sincere desire to cooperate in the reforms that are to be inaugurated.

CHAPTER XVII.

EDUCATION IN THE ARGENTINE REPUBLIC.

CONTENTS.

I. General conditions.
II. La Plata University.
III. Public instruction.

I. GENERAL CONDITIONS.

[A recent report of this office presents an extended survey of education in the Argentine Republic, comprising statistics of primary education derived from official reports for 1907.[1] For the following later information, based upon the educational census of 1909, the Office is indebted to Mr. Charles Lyon Chandler, vice consul at Buenos Aires.]

The first Argentine educational census was taken in 1884, and the national census of 1895 was also an educational one. That of May 25, 1909, however, is not merely far more concise and complete than any of its predecessors, but is said to be the most complete statement of its educational status ever issued by a Latin-American country.

In 1881, $33,295 (United States currency) was spent on primary education by the Argentine Government; in 1907 it was $3,566,403, or over 100 times as much. The average at present is $3,500,000 a year. In all, the Government spent $10,898,674 on education in 1909—as much as on the Army and Navy combined. Of all sums spent by the Government in 1908, 11.84 per cent was on education, a proportion only exceeded by that on the public debt (18.08 per cent) and on public works (12.96 per cent). On primary education alone $29,276,090 has been spent since 1881. In 1895 there were 3,325 primary schools, with 285,854 pupils; in 1909 there were 5,321, with 614,680, an increase of 60 per cent and of 115 per cent, respectively. There were 18,571 primary teachers in 1909, and 42 normal schools with 2,186 teachers.

[1] Report of Commissioner of Education, Vol. I, Chap. VII, 1909, pp. 323–341.

HIGHER SCHOOLS AND SPECIAL EDUCATION.

As for secondary instruction, there were 26 "colegios nacionales," preparing for the three national universities, with 812 teachers. They are well distributed over the Republic. About $400,000 a year is spent on the 6 commercial high schools, which had 1,921 students in 1909. These schools are very popular, and their attendance is rapidly increasing; 850 graduates leave the four professional schools for women yearly.

There are in addition schools for deaf-mutes, a national school of chemistry at San Juan, a normal school of physical education, a national lycée for girls, and a national institution for training teachers for secondary instruction. There is said to be more provision for the education of women in Argentina than in any other South American country, and too much credit can not be given to the devoted army of ladies brought from the United States to Argentina by President Sarmiento (1868–1874 and subsequently) who, with the constant encouragement and assistance of the Argentine Government and people, have made this possible.

The Latin-American States are all essentially agricultural; and in the general movement for the spread of education in its most effective forms, provision for agricultural training commands attention. This is especially true in respect to the Argentine Republic.

The first law relating to the subject was promulgated in 1870, and the following year a course of instruction in agriculture was established in the three national colleges, Tucuman, Salta, and Mendoza. The course at Mendoza was maintained for several years, but very little was accomplished by this early effort, and in 1907 a commission was appointed under the minister of agriculture to inquire into the subject and to advise as to means of promoting this important form of education throughout the Republic. The outcome of the work of the commission was the law of December 27, 1907, providing for the establishment of central schools of agriculture; by a decree of February 19, 1908, five practical schools of agriculture were authorized. These were soon established and well equipped for their purpose. The final stage in this development was the transfer in 1909 of the higher school of agriculture and veterinary science, which had been organized at Buenos Aires in 1904, to the control of the University of Buenos Aires. In its new relation the school was invested with the character of a university faculty. The faculty has at its disposal a large experimental farm.

In 1906 a provincial institute of agronomy and veterinary medicine, which, as early as 1870, had been established and endowed with a valuable property in Santa Catalina, was incorporated with the National University of La Plata, and became the experimental in-

stitute of the faculty of agronomy in that institution. This high recognition of the importance of agriculture and its scientific relations has had a stimulating effect upon the regional schools, which are operating effectually and with valuable results.

II. LA PLATA UNIVERSITY.

By Ernesto Nelson,

Head master of the La Plata University School.

All through South America the universities are more or less shaped after the old style, both in regard to the curriculum and to material equipment.

La Plata University, in Argentine Republic, the newest South American university, is shaped rather after the modern American idea of a university. It occupies an extended area, far from the big cities, which heretofore have been the location more commonly sought for by the large institutions of this kind.

The sites, buildings, and collections of this university represent about $10,000,000, and its yearly expenditure is about $1,000,000. The grounds cover an aggregate of 2,000 acres, distributed at La Plata and Santa Catalina, in the State of Buenos Aires.

The principal departments of the institution are the law school, agricultural school, school of mathematics, school of biology, pedagogical department, and a secondary or preparatory school.

The law school makes a departure from the old idea that this part of the university is concerned only with the training of lawyers for the bar and with the discussion of codes and existing legislation. At La Plata the emphasis is laid upon the study of sociology and history, rather than of existing legislation.

Following this policy, the University of La Plata has secured the cooperation of Europeans who are recognized authorities in respect to sociological questions. Prof. Ferri, the great Italian reformer, whose teachings, together with those of Lombroso, have revolutionized penal systems throughout the civilized world, has given two series of lectures at the University of La Plata, in which he presented his views on penal law. Prof. Altamira, of Spain, a leader in the movement for university extension and popular education, is also a familiar presence at the University of La Plata, in which he has recently given a series of lectures on the teaching of history.

Among other savants from Europe who have given courses at La Plata are Prof. Vallee, the eminent bacteriologist, and Prof. Posada, distinguished by his studies on sociology.

The astronomical department of the university has shared in the important work concerning the study of the southern sky. It has given a great impetus to the study of physical phenomena in the

southern part of this continent and has established meteorological and magnetic stations in different parts of Argentine, at the same time cooperating with scientific institutions of Europe and the United States.

The pedagogical department aims at scientific research in education and child study, and has well equipped laboratories and an experimental primary school.

The secondary department bridges the gap between the university and the elementary grades and so completes the whole educational cycle. This is the only instance in South America of a university universal in its scope and work.

The secondary department has also developed the modern idea that boys should live with boys while they are educated, and by so doing the university has upset the current ideas about boarding-school life in Latin America. It is a fact that while religion is not taught in schools, the Catholic boarding schools, both for young men and young women, are much in favor and patronized by the wealthy classes.

At La Plata the boys live in pleasant surroundings, have plenty of opportunities for sport and physical exercises, and are given a full share in the enjoyments of life.

Instead of following the American idea of having separate buildings for dormitories and dining halls, the University of La Plata has developed the home-unit idea by having separate residences, each of which accommodates about 35 students, and contains a dining hall, a kitchen, a clubroom, a library, etc., besides individual bedrooms for each of the inmates. It is also this department of the university that had the novel idea of sending a group of boy students on a vacation trip through Europe and the United States. As this was a tentative experiment, the group consisted of five students only, but this number will be increased in following years.

III. PUBLIC INSTRUCTION.[1]

[*Translation of passage concerning public instruction in the message of the President of the Argentine Republic read before the national assembly on May 12, 1911.*]

The Executive Power regards public instruction under two complementary aspects, to wit: The reform of the general plans of education, and the proper management of national institutes and colleges. It is fair to acknowledge, in regard to the first question, that the multiplicity of provisions in force concerning secondary instruction is detrimental to the directing unity of these studies. It is necessary to make them uniform by means of logical and lasting

[1] Furnished for the Commissioner's report by the Pan-American Union.

legislation, leaving the details requiring constant innovations to be governed by regulations. As soon as the first symptoms indicating the existence of irregularities were noticed a careful investigation was started under a spirit of strict severity and justice, and in this respect the President assures that all causes, as well as all factors, of disturbance, shall be eliminated.

The decree of December last, placing the normal schools under the jurisdiction of the National Council of Education, is equivalent to returning them to the situation created by the law of July, 1884, and the decree of April, 1893. Nothing is more logical than placing the institutions where teachers are trained under the care of the department which watches over elementary instruction. The curricula, the pedagogic ideas, the disciplinary regulations, the mental and moral supervision over the teaching personnel should be centralized so as to respond to the same orientation and purpose of primary instruction that the unity of thought requires.

In October last there were inaugurated 468 primary schools, making a total of 2,067 institutions of this kind; but this number is far below the demands of the people, and every effort should be made to increase the number of schools and colleges.

CHAPTER XVIII.

EDUCATION IN CHILE.

[*Derived from report by A. A. Winslow, American consul at Valparaiso.*]

The public schools of Chile are under the direct supervision of the Government, and all appropriations for public instruction are made from the general funds of the Government, and are apportioned by an act of Congress. There is a Minister of Public Instruction, with a seat in the President's cabinet, aided by a Council of Public Instruction, and surrounded by a corps of inspectors and assistants at Santiago, with local organizations in the principal cities and capitals of Provinces.

Much has been accomplished during the past five years by the Government in advancing educational interests and in bringing the public schools to a higher standard. Many new buildings have been erected and old ones remodeled and refurnished. At present there are a large number of new buildings under construction.

The first free public school was opened in Santiago in 1813. Chile now has 2,475 primary schools, 72 high schools, and 16 normal schools, to say nothing of the several Government institutions for higher education. At first the progress was rather slow, for during 1850 the Government expended only $224,662 (U. S. gold) for public education, and for 1900 the amount reached but $2,681,719, while for 1909 the total appropriation amounted to $9,000,156, with a total attendance of 240,591 children.

Of the 2,475 primary schools in 1909, there were 787 city and town schools, attended by 69,413 children, and 1,688 country schools, attended by 138,326 children. Of the schools, 355 were held in buildings owned by the Government, 1,839 in rented buildings, and 281 in rooms provided by the patrons of the schools.

The following table gives a very fair idea of the course covered in the primary public schools of Chile.[1]

[1] The number of subjects and the total hours a week, as given in the above table and in the corresponding tables for secondary and normal schools, are excessive and give ground for the constant complaint of teachers and school authorities in Chile that the programs are overcrowded and can not be carried out. Reform in this respect is recognized as indispensable. [Ed.]

Number of hours per week for each study.

Subjects.	First grade.		Second grade.		Third grade.	
	First school year.	Second school year.	Third school year.	Fourth school year.	Fifth school year.	Sixth school year.
Reading and writing	9					
Object lessons	3	2				
Reading and recitations		6	2	2	2	2
Grammar		2	2	2	2	2
Composition			2	2	2	2
Dictation		2	2	2	2	2
Arithmetic	4	4	4	4	4	4
Geometry			1	1	1	1
History of Chile	1	1	1	1	1	1
Geography	2	2	2	2	2	2
Natural history and hygiene			2	2	2	2
Physics and chemistry					2	2
Religion	2	2	2	2	2	2
Civic education			1	2	2	2
Penmanship		2	2	2	2	2
Drawing	2	2	2	2	2	2
Gymnastics and singing	4	2	2	2	1	1
Manual training	2	2	2	2	4	4
Total	29	29	29	30	33	33

Children may enter the primary schools at the age of 5 years; but few are found in these schools at the age of 14, and many pass to the high schools after reaching the age of 10, the minimum age at which children are allowed to enter. During 1909 there were 26,875 boys and 29,864 girls in the primary schools from 5 to 7 years, 42,150 boys and 42,451 girls from 8 to 10, with 31,832 boys and 37,640 girls from 11 to 13, while there were but 5,723 boys and 9,727 girls in the schools over 13 years of age.

The 2,475 primary schools have 591 male and 1,926 female teachers, with 607 male and 1,546 female assistants. Of the 787 city schools, 166 are for boys, 184 for girls, and 201 for both boys and girls, while of the 1,688 country schools, 330 are for boys, 133 for girls, and 1,225 for both boys and girls.

SECONDARY SCHOOLS.

The 39 secondary schools for boys (liceos) were in charge of 598 teachers, of whom 31 were German, 10 French, 7 English, 7 Italian, 2 American, and 518 Chilean. The following table, showing the number of hours a week for each study, covers quite fully the work in the boys' high schools.

Number of hours per week for each subject.

Subjects.	Preparatory course, years.			Regular course, years.					
	First.	Second.	Third.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.
Penmanship		3	4						
Spanish	8	5	5	5	5	5	5	3	3
French		3	3	2	2	2	2	1	1
Mathematics	4	4	4	5	5	5	5	4	4
Object lessons and history and geography	5	4	4	3	3	3	3	4	4
Singing	2	3	3	2	2	2	2	2	2
Gymnastics				2	2	2	2	2	2
Drawing			2	2	2	2	2	2	2
Religion	2	2	2	2	2	2	2		
Philosophy								2	2
English or German				3	3	3	3	2	2
Accounting								2	2
Physics						1	1	2	2
Chemistry						1	1	2	2
Natural history						2	2		
Total	21	24	27	26	26	30	30	28	28

The 33 secondary schools for girls were in charge of 435 teachers, of whom 25 were German, 16 French, 19 English, and 360 Chilean. But little more than 1 per cent of the girls who enter reach the sixth grade, and only about 2 per cent reach the fifth year. The following table shows the number of hours a week given to each study:

Subjects.	Years of the course.					
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.
Spanish	3	3	3	3	3	3
French	4	4	4	1	1	1
English or German				4	4	4
Mathematics, with domestic economy during last years	3	3	3	2	2	2
History and geography	2	2	2	2	2	2
Natural and physical science	2	2	2	2	2	2
Hygiene and domestic economy	1	1	1	2	2	2
Religion and sacred history	2	2	2	1	1	1
Penmanship	2	2	2	2	2	2
Drawing	2	2	2	2	2	2
Singing	2	2	2	2	2	2
Gymnastics	3	3	3	3	3	3
Handiwork, with sewing and embroidery last 3 years	2	2	2	3	3	3
Total	28	28	28	29	29	29

NORMAL SCHOOLS.

There are 6 normal schools for men, with an attendance of 883 in 1909, and a corps of 115 teachers, of whom 7 were German, 1 Austrian, and 1 French. From the beginning, German methods have predominated in the normal schools of the country. The following table covers fairly well the work done in the normal schools for men, which supply a large proportion of the men teachers in the country. This is given in week hours.

Number of hours per week for each subject.

Subjects.	Years.					Total hours.
	First.	Second.	Third.	Fourth.	Fifth.	
Practical and theoretical pedagogy	.....	.....	3	5	12	20
Religion and morals	2	2	2	1	1	8
Spanish	5	5	5	5	5	25
French	2	2	2	2	2	10
Arithmetic and algebra	3	3	2	2	1	11
Accounting	.....	.....	1	1	.....	2
Elemental geometry and trigonometry	2	2	2	2	1	9
Natural history and hygiene	3	3	2	2	2	12
Agriculture, arboriculture, horticulture, and gardening	1	1	1	1	1	5
Physics and chemistry	2	2	2	2	1	9
Political history	3	3	2	2	2	12
Civic and political economy	1	1	1	1	1	5
Geography and cosmography	2	2	2	1	1	8
Penmanship	2	2	1	1	.....	6
Drawing	2	2	2	2	2	10
Music, singing, violin, etc	4	4	4	4	4	20
Gymnastics and military exercises	2	2	2	2	2	10
Manual training	2	2	2	2	2	10
Total	38	38	38	39	40	192

The 10 normal schools for women had an attendance during 1909 of 1,316, with a corps of 35 male teachers, of whom 5 were German, 2 Spanish, and 1 French; and 147 female teachers, of whom 6 were German, 1 French, 4 English, 1 American, and 2 Swiss. The attendance at the normal school for women is better during the last two years of the course than at the normal for men. Below is given a table covering the work to be done as planned by the superintendent of instruction:

Number of hours per week for each subject.

Subjects.	Years.					Total hours.
	First.	Second.	Third.	Fourth.	Fifth.	
Religion	2	2	2	1	1	8
Spanish	5	5	5	5	5	25
Mathematics	5	5	5	5	2	22
History and geography	4	5	5	4	4	22
Physical and natural sciences	4	4	4	4	4	20
Pedagogy	.....	.....	3	3	3	9
Methodology	.....	.....	1	3	2	6
Practice	.....	.....	.....	.....	5	5
Domestic economy and hygiene	2	2	2	1	1	8
French	2	2	2	2	1	9
Penmanship	2	2	1	.....	.....	5
Drawing	2	2	2	2	2	10
Singing and violin	4	4	4	4	4	20
Gymnastics	2	2	2	2	2	10
Designing	2	2	2	2	2	10
Total	36	37	40	38	38	189

COMMERCIAL EDUCATION.

The interest in commercial education, which has been noted in former reports of this series, continues, and schools of this character have been established in 10 cities of Chile through the combined

efforts of the Government and of municipal and private enterprise. In 1909 the staff of these schools comprised foreign teachers as follows: Six German, 1 Spanish, 1 Swiss, 6 English, and 3 from the United States. The following table and context comprised in the report by Mr. Winslow shows a week's program for each year of the course in the commercial schools:

Number of hours per week for each subject.

Subjects.	Years of course.		
	First.	Second.	Third.
German	4	5	5
Penmanship	3	3	.....
Spanish	4	3	.....
Bookkeeping	4	5	5
Commercial law	2	3	3
Gymnastics	2	.....	.....
Commercial geography	2	.....	5
English	5	5	4
Industrial chemistry	4	.....	.....
Mathematics	5	5	3
Hygiene	.....	2	2
Commercial drawing	.....	.....	3
Treatment of mechanics	.....	5	5
Total	35	36	35

The principal instructors in the military school at Santiago are German, and German methods prevail. In the naval school at Valparaiso nearly everything is English. The Government has just engaged four English instructors for this school for the coming year, 1911.

The public schools of Chile are ably supplemented by a number of private schools conducted by foreigners, where many boys and girls from the best Chilean families receive most of their education. Many of the graduates from these private schools become teachers in the public schools. Several of the private schools are mission schools, and among them are a girls' college at Santiago, sustained by the Methodist Episcopal foreign mission board, and a large college for boys, supported by the Presbyterian foreign mission board. These, with others of lesser importance, are accomplishing much, and are greatly appreciated by the Chileans.

CHAPTER XIX.

EDUCATIONAL MOVEMENTS IN WESTERN EUROPE.

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I. GREAT BRITAIN.

WIDESPREAD ACTIVITY.

The year has been marked by decided activity in regard to education in both divisions of Great Britain and on the part of all the agencies by which the progress of this public interest is promoted. In Scotland this activity has been directed mainly toward carrying out the provisions of the law of 1908 in respect to new responsibilities placed upon school boards. These provisions related to the extension of the period of compulsory school attendance and to care for the physical welfare of school children. The latter purpose has for some time engaged the efforts of the principal school boards, and these are furnishing important lessons in the conduct of the

medical and hygienic inspection of schools. This work has developed not in cities alone, but in entire counties.

Scotland has also led in measures for helping pupils at the end of their school life to find suitable employment, a movement which has spread throughout the Kingdom and is proving of great economic, as well as humanitarian, importance.

In England the movement in education is deeply involved with vested interests and political antagonisms, and as every important measure affecting the interest is discussed in Parliament, where all the controlling forces—the local authorities, the great educational associations, as well as political parties—have representation, the controversy becomes intense at every stage of progress. In no other country of the world is the educational situation so complete a reflex of political life.

The growth of Government activity in education is a striking fact in the social development now taking place in Great Britain. It is shown by the treasury grants for education, which are steadily increasing, with a corresponding increase in the directive and supervisory work of the Government. The education vote for the year 1910–11 carried a total grant of £16,843,356 and for 1911–12 a total of £17,296,608, or, expressed in United States equivalents, $81,858,710 and $84,061,514. These totals include grants to universities and colleges and grants for the promotion of science and art, but the greater part of the money, above 96 per cent, is for public, or elementary, schools. England, with its population of 36,075,000, absorbed for this purpose above fourteen millions in 1910–11 ($68,353,967). The grant for public education in Scotland the same year was £2,253,725 ($10,953,104).

The treasury appropriations quoted cover about half the expenditure for public education; local taxes contribute nearly the same amount, and, with receipts from miscellaneous sources, make up a little more than half the entire cost of public schools in both divisions of the Kingdom.

In England the growing force of democracy is indicated by the breaking down of barriers between the public elementary schools and the older secondary schools, through their common participation in public funds. As will be seen by reference to details comprised in this chapter, particularly by Tables 4–6, inclusive, the financial records of elementary education and of the higher departments are still kept separate, but in the discussions of the vital matter of income the two interests are rapidly becoming inseparable.

It is interesting to recall, in this connection, that in 1902, when the new education act was passed for England, the Government was

appropriating for its elementary schools a little over £8,000,000; hence in less than a decade the treasury appropriation for this purpose has increased by nearly 75 per cent.

The Government grants do not indicate simply, as in earlier years, awakened convictions of national need on the part of a few earnest leaders, but insistent public demands which Parliament must heed. The change in this respect in England, the growth of a strong and diffused public opinion in support of popular education, is much more striking than the enlarged appropriations for the service.

Public opinion in England tends always to organize itself around established interests, whence arise the number of educational associations, all vigorously engaged in advancing the special services which they represent. There is no common arena of discussion like that of the Educational Institute of Scotland, which covers the whole field. But it is noticeable that with the increasing conviction in England that education must have free course among the people, there is a growing sense of the oneness of its purposes and processes. This feeling has given rise to the many recent conferences touching aspects of the subject that transcend the limits of particular grades of instruction. The most important of such conferences during the current year were the rural education conference, held July 14 under the auspices of the board of agriculture and the board of education, and the imperial education conference. The latter was convened by the Government in April, preceding by two months the coronation ceremonies. The arrangements for the conference were made through the combined agency of the board of education, the colonial office, and the India office, in accordance with plans outlined at the close of the Federal Education Conference of 1907.

The imposing assembly, which met for the opening session April 25 of the present year, comprised representatives of every division of the Kingdom, including the colonies and overseas dominions. The significance of the conference lies chiefly in the fact of its assembly and in the indications it gave of the presence of similar forces working out by subtle processes a union of peoples stronger than the mere bonds of government. The morning sessions of the conference were private; for the afternoon sessions, which were devoted to the open discussion of educational problems, the participation of representatives of 14 universities and 55 educational associations of Great Britain was invited. Among matters which received general assent the most important were propositions looking to "arrangements for the mutual recognition of teachers' certificates," for the "recruiting of candidates for educational appointments in the overseas dominions, including India," and for "promoting uniform schemes for reporting similar data." A motion for the establishment of an

"Imperial Education Bureau" was modified to a request for "such extension" of the services of the board of education "as will meet the needs of the various education departments of His Majesty's dominions." It was also recommended that the several education departments of the Empire should prepare and print monographs on curricula, training of teachers, compulsory attendance, education of children in sparsely populated districts, and medical inspection, accompanied by an "accurate record of the exact meaning attached to the several technical terms used by the various education departments in the presentation of their statistics."

The last recommendation bears upon a well-recognized need; without common terms and statistical uniformity, exact comparative studies of education are impossible, but the interchange of experiences is certainly not less important as a stimulus to new and renewed exertions. This is the conviction that furnishes the motive for educational congresses and conferences which crowd rapidly upon each other, and among which the Imperial Conference has preeminent political significance for the different members of the Empire.

The political entanglements of the English system of education serve to emphasize what may be called its national as distinguished from its local and professional bearing. Hence its special interest to our own country, where there are great problems of education yet to be settled which must be approached from the standpoint of national welfare.

Among the events of the year must be included the "Tercentenary of the King James's version of the English Bible," which was celebrated in all English-speaking countries. A feature of the celebration in England was the gathering of a delegation at Buckingham Palace, March 21, for the presentation of a Bible to King George. The schools of the country were represented in that assembly by the president of the National Union of Teachers and by the chairman of the Head Masters' Conference. The significance of the event for those engaged in the work of education was expressed by the Archbishop of Canterbury, who, in the presentation address, characterized the Bible as an "inestimable blessing bestowed upon the English-speaking people by its translation into our mother-tongue and its influence in the molding of our national life." Of that influence he said:

> It has sweetened home life; it has set a standard of pure speech; it has permeated literature and art; it has helped to remove social wrongs and to ameliorate conditions of labor; it has modified the laws of the realm and shaped the national character, and it has fostered international comity and good will among men.

The educational section of the British Association, which met at Portsmouth in the month of August, maintained the high level which has characterized the proceedings of this section since its organization in 1906. The opening address was delivered by the Right Rev. J. E. C. Welldon, Dean of Manchester, whose theme, "Educational Problems of the Day," was treated with constant reference to a democratic conception of education in modern States. The principles on which such a conception is based were enunciated by him briefly as follows:

That every child shall enjoy the opportunity of developing in full measure the intellectual and moral faculties with which God has endowed him or her.

That no difference of opportunity, or as little difference as possible, shall exist between the richer and the poorer classes of society.

That the supreme object of education is to provide good citizens—citizens who, in Milton's stately language, will be able to "perform justly, skillfully, and magnanimously all the offices, both public and private, of peace and war."

That as the personal influence of the teacher is a potent factor in education, it is the business of the State to insure the highest possible efficiency, not only of intelligence, but of character, in the men and women who adopt the educational profession as their life work.

EXPANDING SCOPE OF THE ENGLISH SYSTEM.

A closer examination of the details of the year's record emphasizes the main distinction between the two divisions of the United Kingdom. In Scotland the foundations of a broad national system were firmly laid on the lines of the older parish system by the education act of 1872. On the contrary, the English act of 1870 was concerned only with elementary education of a narrow scope, and it was by a liberal construction of its terms that the school boards of the large cities broke through its bounds. The act of 1902 provided for an upward expansion that is limited only by the disposition of the local authorities and by the restriction of the tax they may levy for education other than elementary. The variety of schools and higher institutions that have been drawn within one administrative system by this later act and the growth of the different divisions for the last three years reported are indicated by the data given in Table 1.[1]

[1] The table referred to is compiled from tables in the reports of the board of education for the years specified.

TABLE 1.—*Schools and pupils under the board of education, England and Wales.*

Class of schools.	1907–8		1908–9		1909–10	
	Schools.	Enrollment.	Schools.	Enrollment.	Schools.	Enrollment.
Elementary education:						
Public elementary schools	20,621	5,984,130	20,699	6,025,163	20,739	6,045,089
Certified efficient schools	75	4,988	77	5,153	74	9,566
Special schools—						
For mentally and physically defective	190	13,247	215	14,682	279	16,293
For the deaf	47	3,421	48	3,468	51	3,712
For the blind	39	1,642	39	1,659	40	1,760
For epileptics	5	216	5	265	6	464
Poor law schools	66	15,470	66	15,470	68	15,736
Higher elementary schools	38	8,718	44	9,720	59	12,289
Higher education:						
Evening schools, etc., for further education	6,874	751,600	7,153	752,356	7,944	768,358
Secondary schools	840	81,719	912	148,794	950	156,337
Training colleges	79	10,492	83	11,372	84	11,924
Technical instruction:						
Technical institutions	37	2,863	42	3,400	37	3,032
Day technical classes	97	9,029	103	10,227	113	11,172
Schools of art	225	41,723	225	42,112	226	43,348
Art classes	40	2,493	46	3,060	48	3,220
Total	29,273	6,931,751	29,757	7,036,901	30,718	7,102,300

PUBLIC ELEMENTARY SCHOOLS.

The different classes of schools comprised in the foregoing table are not closely coordinated, and elementary education forms, as it were, a division within a system rather than the basis of a system. At the same time the bonds of union between the different divisions are increasing, and the main problems of elementary education which will claim attention here are more and more complicated with those of secondary and technical education.

The schools termed "public elementary" in Table 1 are now classed as "council or provided"—that is, provided by the councils, municipal and county—which have taken the place of the former board schools and voluntary or nonprovided schools. The boards of managers for the latter must include, in addition to the foundation managers, a number of members appointed by the local authorities in the proportion of 2 to 4. (Act 1902, Pt. III, sec. 6 (2).) The nonprovided schools share in the Government grant, and also in the local taxes on the same terms as the provided schools. The number of public elementary schools (England and Wales) in 1910 was, in round numbers, 21,700, having an enrollment of about 6,000,000 pupils and employing a force of 161,000 adult teachers. (See Tables 2 and 4.) The Government grant meets 49 per cent of the cost of the schools (Tables 5 and 6), and local sources, chiefly rates (taxes), and borough appropriations the remaining 51 per cent. The expenditure for elementary education reached in 1909 the total of $110,784,545. (See Table 7.)

The distribution of pupils under the different types of local authorities, as shown in Table 3, emphasizes the excess of urban populations in England. Cities and urban districts furnish about 64 per cent of the school enrollment and a much larger proportionate share of the school expenditures. (See Table 8.)

TABLE 2.—*Statistics of public elementary schools, England and Wales, for year ending July 31, 1910.*[1]

Number of schools	20,739
Enrollment:	
Boys	3,046,582
Girls	2,987,507
Total	6,045,089
Average attendance	5,364,106
Per cent of enrollment	88.7
Teachers	171,291
Expenditures	[2] £22,795,174
Per capita of enrollment	$18.33
Per capita of average attendance	$20.65

TABLE 3.—*Distribution of pupils in average attendance in 1909–10 under the different types of local authorities having independent control of public schools in their respective areas.*

Classes of schools.	England, total.	Wales, total.
Counties	1,925,861	231,683
Boroughs (more than 20,000 inhabitants)	540,651	9,459
Urban districts (more than 10,000 inhabitants)	289,842	71,886
London	652,630	.....
County boroughs	1,557,146	74,662
Schools not maintained by L. E. A. (Section 15, Act of 1902)	10,286	.....
Total	4,976,416	387,690

Total pupils in average attendance, England and Wales	5,364,106
In municipal and urban areas	3,427,959
Per cent of total	63.9
In counties	1,936,147
Per cent of total	36.1

TABLE 4.—*Status of adult teachers in the elementary schools of England and Wales, 1909–10.*

Class of teachers.	Men.	Women.	Total.
Certificated:			
Trained	23,381	29,950	53,331
Untrained	9,424	34,640	44,064
Uncertificated	6,003	39,546	45,549
Supplementary and provisional	149	16,238	16,387
Student teachers	842	1,623	2,465
Total	39,799	121,997	161,796

[1] This table and the remaining tables pertaining to the public elementary schools of England and Wales are derived from the Report of the Board of Education, Part I, educational statistics, 1909–1910; Part II, financial statistics, 1908–1910.

[2] United States equivalent, $110,784,545.

THE FINANCIAL PROBLEM.

Local authorities are obliged by law to establish and maintain schools; they engage and pay the teachers and have absolute control of the schools, excepting as regards conditions for sharing in the Government grant. These conditions are determined by the board of education, which thus makes its power felt in the internal conduct of the schools. When the conditions impose extra duties upon school authorities the claim is made that the Government should increase its aid; at the same time, additional duties, for instance those of medical inspection, bear more heavily upon some local authorities than upon others; so that to the complaint of the financial burden on the part of the local authorities is added that of financial inequality.

In the debate on the education estimates for 1911, as submitted to the House of Commons, the fact was brought out that, whereas in the decade ending in 1902 the Government grant bore 61 per cent of the expenditure on elementary education, the proportion has since fallen to 49 per cent. By the relative decline in the grants and the increase in expenditure, the local authorities in 1909 were "£1,000,000 worse off than they were two years before."

It was urged that Government should increase its proportion of the cost and that measures should be taken to equalize the burden of the school tax. The differences in this respect are great. In some places the rates (local taxes) contribute only 15 per cent of the school expenditure; in London they contribute 70 per cent. Often, where the rates are least the wealth is greatest and the need is least; and again, where the rates are highest the wealth is least; and yet, in the latter communities there is immense demand for the work the education authorities have to do for the general child welfare. The official report shows that the education rate varies from 2½ pence (5 cents) in the pound to 27.6 pence (56 cents). The average for different types of local authorities in 1909 was as follows:

Type of area.	Average rate for education per pound ($4.86) of assessable value.	
	England.	Wales.
1. Administrative counties:	*Pence.* (*Cts.*)	*Pence.* (*Cts.*)
(*a*) Areas under county councils	10.6 (21.2)	15.1 (30.2)
(*b*) Boroughs	12.2 (24.4)	15.1 (30.2)
(*c*) Urban districts	17.4 (34.8)	22.3 (44.6)
Total of above	11.6 (23.2)	16.4 (32.8)
2. London	17.2 (34.4)	.....
3. County boroughs	16.1 (32.2)	17.0 (34.0)

The discussion of this problem in the House of Commons gives interest to the financial details presented in the following tables. The

amount of money at the disposal of local authorities for educational purposes in England and Wales is shown in Table 5 and the relative proportion from each contributing source in Table 6. In Table 7 the expenditure for elementary schools alone is presented, with the distribution of the amount among different types of local authorities.

TABLE 5.—*Income of local educational authorities for the year ending Mar. 31, 1909.*

Sources.	Elementary education.		Higher education.	
	Income.	United States equivalent.	Income.	United States equivalent.
Parliamentary grants	£11,329,380	$55,060,787	£1,063,628	$5,169,232
Rates and borough funds	11,162,515	54,249,823	1,768,444	8,594,638
Local appropriations	93,214	453,020	197,277	958,766
Fees and sale of books	143,000	695,009	417,135	2,027,276
Endowments and miscellaneous	217,182	1,055,504	199,336	968,773
Residue grants			829,159	4,029,713
Total	22,945,297	111,514,143	4,474,979	21,748,398

Grand total income for elementary and higher education, £27,420,276; United States equivalent, $133,262,541.

TABLE 6.—*Proportion of the total receipts for educational purposes derived from the several contributing sources.*

Sources.	Elementary education.	Higher education.
	Per cent.	*Per cent.*
Parliamentary grants	49.3	[1] 42.3
Rates and borough funds and receipts from other local sources	49.0	44.0
Fees and sale of books	.6	9.3
Endowments and other receipts	1.1	4.4

[1] Includes residue grants from the liquor duties.

TABLE 7.—*Distribution, by types of local authorities, of expenditure for elementary education for year ending Mar. 31, 1909.*

Types of local authorities.	Total expenditure.	
		U. S. equivalent.
1. Administrative counties:		
(*a*) Areas under county councils	£ 7,861,361	$38,206,214
(*b*) Boroughs	2,127,419	10,339,256
(*c*) Urban districts	1,642,944	7,984,708
2. London	4,368,357	21,230,215
3. County boroughs	6,776,490	32,933,741
4. Joint authorities	18,603	90,411
Total	22,795,174	110,784,545

	Per cent.
Proportion of total expenditure borne by London and county boroughs	48.8
By smaller boroughs and urban districts	16.5
By county councils	33.6
By joint authorities	1.1

THE PROBLEM OF THE TRAINED TEACHER.

The problem of securing trained and competent teachers for elementary schools, always a difficult one to solve, has reached an acute stage in England at the present time. The official regulations require that the head teacher of a school shall be certificated, and efforts are constantly put forth by the board of education to increase the proportion of certificated or trained teachers in the lower positions. But the number of duly trained candidates increases more rapidly than appointments can be secured. Two causes are assigned for this inequality between supply and demand. (1) The multiplication of training colleges; (2) the narrow policy of local authorities, indicated by exclusive employment of local candidates and by the meager salaries offered. During the debate over the budget the president of the board strongly defended the policy of the Government in encouraging an increase in the number of training colleges. In this connection, he declared that the new colleges had taken up the work with enthusiasm; that the universities by their provision for the training of teachers had imparted an entirely new spirit to the profession, while, at the same time, the religious restrictions imposed by the old denominational colleges had been broken down by the requirement that half the number of their places must be free to all suitable candidates as a condition for sharing in the parliamentary grants. Out of a total of 4,800 places in denominational colleges, half are free, a change which has been made without detriment to the religious character of the colleges, and this number, together with something over 7,000 in undenominational colleges, makes a total of 10,000 free places open to intending teachers.

With regard to the number of certificated teachers looking in vain for positions, Mr. Runciman attributed this to the fact that the "local education authorities are drawing far too much from their own districts." He urged also that the new training colleges, which are mostly provided by municipal authorities, should endeavor to give a definite rural bias to their training, so that students could be prepared in them for places in rural districts. In this connection he said:

> Two years ago I offered grants for an extra year if any students were willing to stay on to obtain horticulture, agricultural, or some other like instruction—something closely in touch with the tastes and principles of rural schools and rural teachers. I suggested that that should be done at the Swanley College. I am sorry to say that not one single person applied for it. We shall have to find out how it is that teachers are carefully avoiding the specialized instruction for giving a rural bias to their training. If that offer is not availed of in the future, I will not say that I will withdraw it, but I must modify it. It shows how difficult it is for a teacher to devote part of his time to purely rural training. Perhaps it is rather due to a mistaken idea on the part of many teachers to go as soon as possible into the towns.

Several members of the House continued the discussion of this problem. Mr. William Anson, member for Oxford University, called attention to the fact that, whereas formerly graduates of the training colleges were appointed as soon as they left the college, in 1909 out of a total of 4,836 who graduated in July 1,500 were still out of employment in October. But in spite of this excessive supply over demand, training colleges are being built very rapidly. The board, by a contribution of 75 per cent of the cost, assists local authorities to build new colleges, and £100,000 is allocated this year in aid of such colleges.

With regard to the narrow view of professional training thus encouraged, Mr. Anson said:

> Local authorities are justly proud of their own educational appliances, and now what happens? The local education authority first of all sends its children who are going into the teaching profession from their elementary school to their own secondary school, where they are prepared for that profession. They are sent from the local authority's secondary school to the local authority's training college, and then the local authority to teacherships within its area is disposed to give the preference to the teachers from its own training colleges. Therefore, the teacher moves in this narrow circle—from the elementary school to the secondary school, and from the secondary school to the training colleges, from the training college back to the elementary school, possibly within the compass of one urban area. One can not think that that gives to the teacher that variety of experience and breadth of view which we desire to teach in our elementary school to possess.

Having reference to the serious agitation excited in London over the conditions of unemployed graduates, Mr. Anson explained that the London education authorities are very desirous of drawing their teachers from all quarters and have announced that they will not take more than a certain number of teachers from out of their own training colleges. Consequently, many of their graduates will get no employment in London, and unfortunately they are looked upon askance if they try to get employment elsewhere.

Mr. Anson was followed by Sir James Yoxall, formerly secretary of the National Union of Teachers, who strongly opposed the notion that there are too many training colleges. The crux of the problem, in his opinion, did not lie in that direction. On this point he said:

> I am not in favor, and the teachers with whom I am associated and for whom I speak are not in favor, of checking the number of training college places. They are anxious, and have been all along, that certain modifications should be made in the training college system, but to pursue the policy of multiplying college places while at the same time increasing the number of teachers who have never been to training colleges at all is surely madness, and that is the policy of the board of education.
>
> The remedy is not to narrow the number of places in training colleges or to attack critics who put their finger upon this weak spot. The remedy lies in the Board of Education, as early as may be, and as gradually as is fair

and proper and practicable, preventing the entrance into the profession, as certificated teachers, of young men and young women who have not been to a training college. If the board of education had, in times past, when they were instituting these training college places, similarly narrowed what is called the acting teachers' list and adjusted more carefully the demand and the supply, this difficulty would never have arisen.

The present provision of training colleges classified by their controlling authorities, as shown in Table 7, serves to emphasize the main contention in the foregoing discussion.

TABLE 8.—*Training colleges, England and Wales.*

Classification by controlling authorities.	1908–9.				1909–10.			
	Number.	Number of students.			Number.	Number of students.		
		Men.	Women.	Total.		Men.	Women.	Total.
Training colleges:								
University	20	1,449	1,592	3,091	20	3,781	7,767	11,448
Local education authorities	15	446	2,062	2,508	17	671	2,263	2,934
Voluntary (chiefly denominational)	49	1,636	4,103	5,739	47	1,658	4,070	5,728
Total	84	3,581	7,757	11,338	84	6,110	14,000	20,110

THE UNEMPLOYED GRADUATES.

The public excitement with respect to the unemployed graduates from teachers' colleges was increased by the publication during the year of a circular on the subject bearing the title "The tragedy of the unemployed." According to this circular there were at the time "thousands of young men and women who, after being trained for 7 years at a cost to the State of some £300, are unable to find employment in their own profession, and are without any prospect of doing so." In proof of this statement the following facts were presented in graphic form:

Status of teachers.	Number.	Per cent of total.
1. Certificated college trained	50,000	31.4
2. Certificated nontrained	44,000	27.7
3. Neither trained nor certificated	65,000	40.9

From the above statistics it was inferred that half the children in the schools were "taught by unqualified and often incompetent teachers; and that "at least 15,000 teachers have no other qualifications than that they are over 18 years of age and have been vaccinated."

This condition was attributed to the parsimony of county councils and the maintenance of excessively large classes. The circular states

that "in the metropolis of London alone there are 2,000 classes of more than 60 children, and a similar state of things obtains in the provinces. Everybody who knows anything about schools knows that the ablest teacher in the world with a class of more than 60 can not possibly educate them."

MEASURES FOR RAISING THE STANDARD OF THE TEACHING FORCE.

Among measures recently adopted by the Board of Education for the improvement of elementary schools special importance attaches, at this time, to those directed to the improvement of the teaching force. These measures relate to the preliminary education of intending teachers and to the official requirements as to staff for schools participating in the Government grant. With regard to the former matter, the action of the board is chiefly advisory, local authorities being, in this case, the determining factor; but as regards the staff, the regulations of the board are decisive.

The latest regulations on the subject, which were issued in 1909, were directed against the two evils of large classes and untrained teachers. The standard adopted and its advance over that which it replaces are indicated by the following schedule showing the classification of teachers and the number of pupils allowed by the regulations for one teacher of each class. The first column gives the scale that was in effect at the time the latest regulations were issued and the second column the new scale that took effect August 1, 1909:

Classification of teachers and number of pupils allowed to one teacher.

Teachers.	Number of children in average attendance to one teacher.	
	Under old regulations.	Under new regulations.
The head teacher	50	35
Each assistant teacher (certificated or holding an equivalent diploma)	60	60
Each certificated assistant teacher[1]	45	35
Each student teacher[1]	45	20
Each supplementary teacher[1]	30	20
Each provisional teacher[2]	30	20

[1] Status determined by special regulations.
[2] After July 31, 1910, provisional assistant teachers ceased to be recognized.

The following tabular statement shows the improvement that has taken place in the staffing of elementary schools since the passage of the education act of 1902:

TABLE 9.—*Staffing of public elementary schools.*

	1902	1908–9	1909–10
Number of departments	31,372	32,065	32,105
Number of scholars in average attendance	4,890,237	5,344,568	5,363,606
Average number of scholars per department	156	167	167
Head teachers:			
Certificated	31,026	31,554	31,646
Others	300	434	422
Assistant teachers:			
Certificated	36,742	63,219	65,726
"Uncertificated"	35,912	43,948	45,121
Additional women	17,588	.....	.....
Supplementary teachers	.....	17,350	15,779
All adult teachers	[1] 121,568	156,505	158,694
Number of scholars per teacher:			
All adult teachers	40	34	34
All certificated and uncertificated	[2] 32	38	38
All certificated teachers	72	56	55

[1] There were in addition 31,924 pupil teachers, probationers, and provisional assistants, making a grand total of 153,492 teachers recognized as such in 1902.
[2] Estimated on the grand total.

CONFLICT OF AUTHORITIES IN THE MATTER OF THE INSPECTORATE.

At every step in the progress of the national system the interaction of the central and local authorities is evident; the influence of the education associations, though less immediate, is even greater. The present year has furnished a striking illustration of checks and counterchecks growing out of this relation in the case of a confidential circular pertaining to the inspection service which was sent out by an officer of the board of education.

For an understanding of the matter it should be explained that the Government maintains a corps of inspectors responsible to the board of education who annually visit and report upon the individual schools in respect to the particulars covered by the grant regulations. Local authorities also employ school inspectors who have no relation to the central board. The circular in question was in the form of a memorandum entitled "The status and duties of inspectors employed by local education authorities." It set forth certain opinions concerning the local inspectors, based upon the results of previous inquiries touching their antecedents, social, professional, and academic, the nature of their duties, and the value of their services, and in plain terms discredited the work of ex-elementary teachers who had been advanced to these posts. From an inquiry in the House of Commons it developed that the circular had been drawn up by the Chief Inspector of Schools in pursuance of the general policy which left trusted officers of the board free to secure the knowledge required in the discharge of their functions by

such means as they might deem advisable. In the course of the discussion the fact was brought out that the circular had been marked confidential by its author, from whom it had passed to the secretary of the board. It had the sign of this officer's approval and was distributed to the entire force of the board's inspectors. It was, however, distinctly stated in the House that the circular had not been signed by the president of the board and did not express the sentiments or purposes that controlled its official actions.

The tenor of the memorandum may be inferred from passages cited in the House of Commons. After reference to the inquiries that had been sent out and to the number of ex-elementary teachers serving as local inspectors, the circular states that of the entire number—

> not more than two or three have had the antecedents which were usually looked for in candidates for junior inspectorships, namely, that they had been educated first at a public school and then at Oxford or Cambridge.
>
> The difference in respect to efficiency between ex-elementary teacher inspectors and those who have had a more liberal education is very great. Very few of our inspectors have a good word to say for local inspectors of the former type, whereas those of the latter type are, with three exceptions, well spoken of.
>
> * * * * * * *
>
> Apart from the fact that elementary teachers are as a rule uncultured and imperfectly educated, and though many, if not most, of them are creatures of tradition and routine, there are special reasons why the bulk of the local inspectors in this country should be unequal to the discharge of their responsible duties. It is in the large towns which had school boards before the appointed day that the majority of local inspectors are to be found.
>
> * * * * * * *
>
> In these towns the local authorities have inherited from the school board not merely a vicious system of local inspection, but also a large number of vicious local inspectors.
>
> * * * * * * *
>
> As compared with the ex-elementary teacher usually engaged in the hopeless task of surveying or trying to survey a wide field of action from a well-worn groove, the inspector of public schools of the 'varsity type has the advantage of being able to look at elementary education from a point of view of complete detachment, and therefore of being able to handle its problems with freshness and originality.

The general interpretation put upon this document was voiced by Sir Philip Magnus in the course of the discussion in the House. After pointing out the impossibility of distinguishing between a circular signed by the chief officer of the board of education and one which expresses the deliberate opinion of the board itself, Mr. Magnus said:

> What happens when a local authority is thinking of appointing a local inspector? The local authority is very often advised by His Majesty's inspector, who frequently visits the schools. They would ask his opinion as to the various qualifications of the persons from amongst whom they wished to make the

appointment. The district inspector, under the board of education, would have received from the chief inspector under the board a letter not asking only questions, but distinctly stating that all other persons except Oxford and Cambridge graduates are unfit to act as local inspectors under the local authority. Therefore, it can not be said for one moment that the president of the board, through his officer, was not interfering in the appointment of those local inspectors by local committees. That is really a very serious matter.

* * * * * * *

Surely it is not only the elementary teachers who have been affected by this expression of opinion on the part of the chief inspector, but it affects all the local universities throughout the Kingdom. We are told that only Oxford and Cambridge graduates are fitted to be appointed to these positions of inspectors. Representing another university, I should be very much surprised if graduates of London University, some of whom have been expressly trained for the function of inspectors and teachers in these schools, were not considered competent to act as local inspectors or chief inspectors. London University has a training college of its own absolutely incorporated with the university. Surely the students of such a training college can be regarded as competent to act as inspectors if they attain a sufficiently high degree. But the opinion of the chief inspector is that none but graduates of Oxford and Cambridge are competent. Of course I have the greatest possible appreciation for the course of study pursued in those older universities, but at the same time I do think it right to say a word not only for the University of London, but also for the provincial universities and for the universities of Scotland and Ireland.

The excitement caused by the circular was greatly due to the conviction that it was part of a determined purpose to "crush down elementary education; to lop off all its natural growths and extensions." This view was strongly expressed by Sir James Yoxall, the representative of the elementary teachers in Parliament. After rehearsing the course of events which gave color to this view of the document, he said:

In fact, at every possible stage and turn the policy of the chief permanent officials of the board, other than those of the elementary school branch of it, has been inimical to a popular and democratic spirit in education.

Intense opposition to this action on the part of the board was manifested by local authorities and by associations of teachers throughout the country.

The National Union of Teachers, one of the largest associations in the world, having a membership of 69,000, on the second day of its annual meeting suspended the standing orders to give place to a discussion of the circular. The conference joined in the universal condemnation of the circular, which was declared to be part "of a whole administrative system intended to discredit schools, scholars, teachers, and inspectors not belonging to a certain social class."

Satisfaction was expressed that Mr. Runciman had repudiated and withdrawn the circular, but nevertheless a resolution was adopted calling for a parliamentary inquiry into the board's administration. Subsequently a demonstration was held under the auspices of the

National Union at Royal Albert Hall, London, to protest against "the slander on the teaching profession contained in the circular." At this demonstration passages were read from the circular more objectionable than those presented before the House of Commons, and amid intense excitement it was resolved that an appeal should be made to the prime minister "to appoint a select committee to inquire into the whole question of appointment and promotion in the inspectorate of the board of education and other branches of the civil service; that a copy of this resolution be sent to the prime minister, the leader of the opposition, the chairman of the Labor Party, the president of the board of education, and other members of Parliament."

The prime minister on his part waived an immediate hearing on the matter, but requested that the desires of the association should be submitted in writing. Meanwhile the event has given vigorous impulse to the demand for a teachers' professional council, advisory to the central board, and an official register of teachers as a means of discriminating between the qualified and the incompetent.

The London Journal of Education, in a dispassionate review of the matter, notes that both parties to the contest appear to have fallen into extremes with regard to qualifications that should weigh most in the choice of school inspectors. The Journal strikes the essentials of the service in a question, "Is it not possible, we ask, to combine the two desiderata, experience and culture?" As to the means of securing this result, the Journal continues: "If the president would announce in future no one shall be appointed to a primary inspectorate who has not taken an honor degree (not necessarily at Oxford or Cambridge) and had besides at least one year's experience of teaching in an elementary school, there would before long be no lack of candidates thus doubly qualified."

The question of values thus raised is pertinent to the service of school supervision under any and all of its varied forms.

SCHOOL-ATTENDANCE BILL.

The most important educational measure submitted to Parliament the present year is a bill for prolonging the period of school attendance. This bill is the culmination of efforts persistently renewed for the last two decades and urged upon the board of education the present year with irresistible force by a delegation from the Association of Education Committees, representing 177 local authorities in the country and one-third the entire population.

This association reaffirms its opinion that no child under 14 years of age should be exempt either partially or wholly from school attendance, and that the Government be urged to raise the age for half time, or partial exemption, from 12 to 13 now, with provision for a further increase to 14 after 2 years.

In support of the resolution the president of the committee denounced the legal provision for half-time attendance, which he declared was "bad educationally, physically, and morally."

As showing the wide consensus of opinion as to the need of prolonging the period of compulsory attendance, the president called attention to the following facts:

An inter-departmental committee, the trade unions, the poor-law commission, and nearly every education authority in the Kingdom had pronounced in favor of some step being taken immediately to raise the age at which children should leave school, either partially or wholly, and the last resolution passed by the Association of Education Committees was that the age should be raised from 12 to 13 now, with provision for a further increase to 14 after 2 years. The pronounced opinion of their association was that the proper age for children to leave school was 16, but they felt that this, at present, was not within the realms of practical politics, and they must be satisfied with less. Certainly, however, the time had now come when, without any friction, the age could be raised to 13, with the promise that in 12 months or 2 years it should be raised to 14. It was true that when, about four years ago, a poll was taken in the textile manufactures, there was a majority against raising the age, but those who lived in the district and knew how that majority was obtained would agree with him that it was not a real test. The majority came from the workers in the card rooms, who were mostly young girls in their teens and were nearly all unmarried, and these, for some reason best known to themselves, voted against raising the age at all. Possibly as they had come to the mills themselves under the existing conditions, they did not see why their brothers and sisters should not do the same. There was also another fact which put a different complexion on the poll. It was very generally supposed that the half-timers were employed by the manufacturers or by the boards of directors of the mill companies, but there was a class of men employed in the mills who dealt with these half-timers and made a living out of them, and therefore they could not expect such men to vote in any other way than to maintain the existing state of things, because it was so much to their advantage. He believed that if a poll was taken again to-morrow, even including the elements he had mentioned, the result would be very different. He did not know anything on which there had been such a strong reversion of opinion during the last few years as on education, and on all hands they found that men who four years ago were willing to see something against raising the age of half-timers were now of the opinion that it would be beneficial to them and their children.[1]

In response, Mr. Runciman assured the delegation that the department was at work on a measure for dealing with the attendance of half-timers, which would be introduced shortly into the House of Commons.

This assurance was realized by the education (school and continuation class attendance) bill, which was presented to the House early in June. The bill comprises four main points, namely: First, the abolition of the yet lingering remnants of the half-time system; second, the permissive adoption by a local authority of compulsory continuative education up to the age of 16 for boys and girls who

[1] See School Government Chronicle, Mar. 11, 1911, pp. 240–241.

have left the day school; third, the raising of the minimum age of exemption from compulsory school attendance to the age of 13 where compulsory continuative education is locally adopted; and, fourth, the locally permissive adoption of day-school attendance by-laws, extending to age 15. If this measure is enacted all day-school attendance will be full-time attendance, and from age 13 to 14 (or 15 at local option) exemption may be granted on condition of attendance at continuation classes.

The need of the proposed legislation with respect to school attendance is further indicated by the following statistics showing the number of pupils by age groups in the total enrollment for 1908–9:

Number of pupils in age groups.

Ages.	Number of pupils.	Per cent of total.
3 to 5	417,424	6.80
5 to 7	1,308,439	21.59
7 to 12	3,236,405	53.45
12 to 15	1,090,052	18.03
15 and over	7,790	.13
Total	6,060,110	100.00

In the total number enrolled were included 79,135 pupils partially exempt from school atendance.

NORMAL PROGRESS IN SCOTLAND.

In Scotland there is little to record from year to year in regard to the essential conditions of a school system, save normal progress, which is illustrated by the steady increase in the enrollment in the schools as shown in the following table:

TABLE 10.—*Comparative statistics of school attendance, 1906 to 1910, inclusive.*[1]

Attendance.	1906	1907	1908	1909	1910
Scholars on register (at end of school year)	806,737	811,000	812,346	826,223	843,242
Average attendance	706,062	711,228	712,076	727,244	743,217
Percentage of average attendance to scholars on registers	87.37	87.70	87.66	88.02	87.66
Infants—*i. e.*, scholars under 7—on registers	158,903	161,148	162,822	166,167	170,219
Per cent of total	19.6	19.8	20.0	20.0	19.6
Older scholars—*i. e.*, scholars above 7—on registers	647,834	649,852	649,524	660,056	673,023
Per cent of total	80.4	80.2	80.0	80.0	81.4

[1] From reports of the Scotch Education Department, 1909–10, 1910–11.

The number of adult teachers employed in the schools in 1910 was 18,024, of whom 12,200 were trained and certificated. The current expenditure for the schools amounted to £3,713,629 ($18,048,237), being at the rate of £4 19s. 11d. ($24.15) per capita of average attendance.

The expenditure for the schools supported by the elected school boards, which enrolled 87 per cent of all the pupils, was £2,167,401 ($10,533,569), of which amount the Government grant furnished 48½ per cent and local taxes 44⅘ per cent, leaving a small balance from other sources. The denominational schools, which are found chiefly in the large cities, derive 75 per cent of their support from the treasury grant.

The system of public education (in Scotland) was not materially changed by the act of 1908, but its scope was greatly extended, and Scotland is now offering important lessons in provision for the physical and social well-being of school children through the agency of public schools.

HIGHER GRADE SCHOOLS.

In both divisions of Great Britain particular efforts are being made at the present time to develop what are termed in England higher elementary schools and in Scotland higher grade or intermediate schools. This effort illustrates in a striking manner the difference in the prevailing conception of popular education in the two divisions. In England the schools of this grade form an integral part of the elementary system, and their programs are simply an extension of those of the elementary grades, arranged in a three-years' course, and providing for vocational training according to local conditions; qualified pupils are admitted to the higher elementary schools at 12 years of age. The local educational authorities establish the schools and must provide equipment and staff as required by the official regulations.

In many cases, especially in the larger municipalities, there is much friction between the central and local authorities in regard to these schools, and the London county council has recently withdrawn its 22 schools of this class from the extra grant list in order to develop them freely, according to their fuller understanding of the needs of the city. On the other hand, the supervision and aid extended by the Government is welcome and necessary in smaller towns and in districts in which it is difficult to maintain schools of this special character, from the lack both of means and of strong public support. The special place which these schools are intended to fill in the English system is clearly indicated by the efforts for drawing off the more promising pupils of the elementary schools into secondary schools. The scope of the higher elementary schools as compared with the elementary grades and with secondary schools is illustrated by the appended programs.

The higher elementary schools on the grant list numbered 51 in 1910, with an enrollment of 10,765 pupils; of these, 9,377 were above

12 years of age. So far little progress has been made in developing the schools on the vocational side.

In Scotland the higher grade schools are closely articulated with the elementary schools below them and with the secondary schools and all three are treated as integral parts of a unified system. Hence in Scotland, the higher grade schools correspond very closely to the manual training high schools of our own country. The education of the children is carried forward on broad lines; English, mathematics, modern languages, science, and drawing forming part of the curriculum. The goal of this course of study is the intermediate certificate, which is proof that the pupil has had at least three years' instruction beyond the elementary stage. In many instances a desire for further advancement is created by this success and pupils continue to the close of the full secondary course of study.

The rapid increase in the higher grade schools of Scotland is indicated by the following statistics:

Higher grade schools of Scotland.

Year.	Number of schools.	Accommodation.	Average number of scholars on registers.	Average attendance.			
				First year's course.	Second year's course.	Beyond second year.	Total.
1900	27	7,740	2,832	1,606	604	351	2,561
1903	36	10,299	5,157	2,663	1,223	662	4,548
1906	137	31,842	19,319	8,664	5,086	3,400	17,150
1909	182	38,390	23,893	10,243	6,948	4,927	22,118

Notwithstanding the different purposes toward which this class of intermediate schools in England and Scotland is directed, forces quite apart from the official authorities are at work which tend to assimilate them to a common type. On account of their relation to the industrial problem as it affects the majority of school children, these schools represent the most interesting field of experiment in the system of which they are a part.

RECENT DEVELOPMENTS IN SECONDARY EDUCATION IN ENGLAND.

By the Education Act of 1902 the province of the local education authorities in England and Wales was extended far beyond the limits set by the act of 1870. In the terms of the Education Act, "The local education authority shall consider the educational needs of their area and take such steps as seem to them desirable, after consultation with the board of education, to supply or aid the supply of education other than elementary and to promote the general coordination of all forms of education." [Part II, Clause 2 (1).]

The term "higher education," as thus used, applies to a variety of agencies, including secondary schools, technical institutions, schools of art, and teachers' training colleges. There is, as yet, little coherence between the different orders of schools thus brought within the same administrative province, but every year new bonds of unity and continuity are formed between them.

The functions of the board of education are substantially the same for all the various classes of schools comprised under the general head of "higher education." They are exercised by means of official regulations determining the conditions on which grants will be allowed for such schools, and by a service of inspection and examination.

In the case of secondary schools the board's requirements have had the effect of raising the average standard of the schools, systematizing their courses of instruction, and improving the quality and methods of teaching. As a consequence, the teachers claim and secure better salaries. The fear that official regulations would be prejudicial to the free initiative and flexible programs which have given force and varied adaptations to the secondary schools of England in the past has been allayed by the increased elasticity of the board's requirements and by special encouragement given to educational experiments conducted in individual schools under favorable circumstances. The local authorities, on their part, have entered earnestly upon the work of extending and equalizing the provision for secondary education, and several of the chief boroughs and the larger counties have sought expert guidance in respect to plans for the improvement of existing schools and the establishment of new schools. Through this double stimulus the number of secondary schools under some degree of public control is rapidly increasing. In 1905 there were 122 secondary schools in England provided by the local authorities; in 1910 out of a total of 841 secondary schools on the grant list 325 were provided. This number included schools originally established by the local authorities and former endowed and proprietary (stock company) schools which have been transferred to the authorities. The remaining schools on the list (numbering 516) have popular representatives upon their governing bodies. In addition to the secondary schools on the grant list there were 87 secondary schools not receiving public aid but recognized as efficient, making, with 109 schools in Wales, a total of 1,037 secondary schools under Government inspection. They registered 172,244 pupils (boys, 92,743; girls, 79,501). Of this total more than one-fourth were on a free basis.

As a condition of receiving grant aid, the board of education requires that a secondary school not managed by the local education

authority shall have on its governing board a majority of members representing a popular constituency, and further that a certain number of free places, ordinarily 25 per cent of the total accommodation, shall be reserved for pupils selected for transfer from the public elementary schools. Through these conditions private control and social exclusiveness are broken up in the secondary schools which have the benefit of public funds, and they are brought within the reach of young people who formerly had access only to public elementary schools.

The effort to preserve the traditional character of secondary education in England, and at the same time to meet the very insistent demand for its wider diffusion and closer adaptations to modern conditions, is shown by the conditions pertaining to the transfer of pupils from elementary to secondary schools. In this connection the official regulations explain that:

> An important though subsidiary object of the elementary schools is to discover individual children who show promise of exceptional capacity and to develop their special gifts (so far as this can be done without sacrificing the interests of the majority of the children), so that they may be qualified to pass at the proper age into secondary schools, and be able to derive the maximum of benefit from the education there offered.

The transfer of pupils from elementary to secondary schools must take place not later than the twelfth year of age; but an earlier age is encouraged by a grant paid on transferred pupils between the ages of 10 and 12 years equivalent to the grant allowed for pupils in the public elementary schools. The main grant in secondary schools is paid in respect of pupils between the ages of 12 and 18 years.

The secondary schools are also being utilized for the academic training of young persons intending to become elementary teachers. They are carefully selected and are aided in their effort by a system of scholarships arranged between the board of education and local authorities.

The distinction between elementary and secondary education is illustrated by the courses of study for the two classes of schools, comprised in the appended prospectuses.

It should be explained that the secondary schools affected by these recent measures are for the most part intended for pupils whose school life ends at about 16 years of age. The higher order of secondary schools, which carry the education of their students up to the age of 18 years, maintain close relations with the older universities and offer with the latter a continuous and elaborate scheme of liberal education.

Program of studies for schools receiving Government grants authorized by board of education.

Grade of school and normal age limits.	Studies.
A. Elementary schools:	
Infant schools (ages 3 to 5)	Physical exercises: Games, singing, breathing; talks on familiar objects.
Infant schools (ages 5 to 7)	Simple exercises in drawing, writing, reading; songs, practice in simple musical intervals, knitting, and plain stitches.
Elementary schools for older scholars (ages 7 to 15) [1]—	
1. Obligatory subjects—	
(*a*) For all classes	Reading, writing, arithmetic, singing, drawing.
(*b*) For the appropriate grades.	Observation lessons and nature study, geography, history, singing, hygiene and physical training, domestic subjects, moral instruction.[2]
2. Special optional subjects for pupils above 11 years of age (for these extra grants are allowed).	Cookery, laundry work, housewifery, combined domestic subjects,[3] dairy work, handicraft, gardening. (The special subjects must be taught in premises suitably equipped for the work, in accordance with an approved syllabus, by a teacher specially qualified for the work, and in classes of limited size, 14 to 18 pupils.)
Higher elementary schools (ages 12 to 16 years).	English language and literature, elementary mathematics, history, and geography; drawing and manual work for boys, and domestic subjects for girls; also provision for special instruction bearing upon the future occupations of pupils, both boys and girls.
B. Secondary schools (normal ages 12 to 16).	English language and literature, one language other than English, geography, history, mathematics, science, and drawing.
Obligatory subjects	If two languages other than English are included, one must be Latin unless the Board of Education sanctions another choice.
Special for girls	Needlework, cookery, laundry work, housekeeping, and household hygiene. An approved course in a combination of these subjects may, for girls over 15 years of age, be substituted partially or wholly for science and for mathematics other than arithmetic.

[1] At 12 years of age pupils may be drafted off to the higher elementary schools, and 12 years is the lower limit of age allowed for transfer to secondary schools, hence a break occurs at that age.

[2] Such instruction may either be (1) incidental, occasional, and given as fitting opportunity arises in the ordinary routine of lessons, or (2) be given systematically and as a course of graduate instruction.

[3] A course of instruction in combined domestic subjects must include cookery, laundry work, and housewifery. In each of these subjects at least half the time must be given to practical work by the scholars with their own hands. The number of scholars registered in a class must not exceed 18, and they must be girls over 12 years of age.

SPECIMEN PROGRAMS OF PRIVATE PREPARATORY SCHOOLS.[1]

Time-table of a school that does sometimes compete for scholarships (available in secondary schools), giving number of hours per week for each subject.

Subjects.	Class I, average age $9\frac{5}{12}$.	Class II, average age $10\frac{5}{12}$.	Class III, average age $11\frac{5}{12}$.	Class IV, average age $12\frac{5}{12}$.	Class V, average age $12\frac{8}{12}$.	Class VI average age $12\frac{3}{12}$.
	Hours.	*Hours.*	*Hours.*	*Hours.*	*Hours.*	*Hours.*
Scripture	1.30	1.20	1.30	1.30	1.30	1.30
English	1.50	2.00	1.40	1.40	1.40	.35
French	2.30	2.30	2.15	2.15	2.15	2.15
Latin	7.00	9.10	7.20	7.50	7.50	7.20
Greek			[2] 4.00	3.40	3.40	5.50
German						
History	1.30	1.30	1.30	1.30	1.30	[3] 2.50
Geography	2.30	2.35	.50	.50	.50	.50
Mathematics: arithmetic	5.15	5.25	1.40	1.40	1.40	1.40
Mathematics: algebra			1.40	1.40	1.40	1.40
Mathematics: Euclid			2.00	2.00	2.00	2.00
Object lessons						
Writing and dictation	1.55	.30	.30	.30	.30	
Drawing [4]						
Preparation	3.00	6 to 9.00	[5] 0 to 9.00	9.00	9.00	9.00

[1] See Board of Education (England) Special Reports on Educational Subjects, vol. 6, p. 49.

[2] Extra time taken from Latin owing to temporary peculiarity of form.

[3] Thirty-five minutes per week to ancient history.

[4] Optional in all cases and alternative with English, geography, or writing.

[5] Preparation time reduced for young or delicate boys.

Composite table based upon returns from several private preparatory schools.[1]

Subjects.	Average hours per week.	
	Class I, or class most nearly averaging age of 9–10.	Top class, average age 13.
	Hours.	*Hours.*
Scripture	2.12	2.3
English	2.49	1.10
French	2.49	3.8
Latin	5.49	7.49
Greek	0	4.34
German	0	[2] 3.41
History	1.57	1.50
Geography	1.41	[3] 1.17
Mathematics	5.23	5.38
Object lessons of elementary science	.57	[4] .53
Writing or dictation	2.25	[5] .53
Drawing	1.31	[6] 1.39
Total [7]	29.84	35.2

[1] See Board of Education (England) Special Reports on Educational Subjects, vol. 6, p. 49.
[2] Usually German is alternative with Greek, with extra French and mathematics; 58.6 per cent of the schools do not teach German at all.
[3] 3.7 per cent of schools reporting omit geography entirely; 6.2 per cent do not teach it to their top form.
[4] 72.5 per cent omit this subject entirely; 83.7 per cent do not teach it to the top form.
[5] One school omits it entirely; 38.7 per cent do not teach it in the top form.
[6] In 34.2 per cent of returns it is an optional subject. The above is the average in the remaining 65.8 per cent.
[7] The average total given above is not the sum of the various items of the table, but is the average of totals actually returned in each school. No school teaches all the subjects enumerated.

The private preparatory schools, whose work is illustrated by the last two of the above programs, prepare pupils for the entrance examinations to the endowed secondary schools, including the great "public schools." The age for admission to these schools and colleges, as some are termed, ranges from 12 to 14. Secondary schools of this type are generally organized in a classical and a modern side, both courses of study being regulated by the requirements for entrance at Oxford or Cambridge. The principal schools of this class include also an army section in which boys are prepared for Woolwich and Sandhurst.

As a rule, it is not expected that pupils from the public elementary schools will enter this higher order of secondary schools, although there is no impassable gulf between the elementary schools and the modern side of the schools here considered.

The standards and general scholastic purposes of this class of institutions may be inferred, (1) from their common entrance requirements; (2) from the daily programs given on pages following.

Subjects of examination for entrance to the higher order of secondary schools.

Latin:
- (1) Unseen translation.
- (2) Composition.
- (3) Grammar.

General:
- (4) Scripture.
- (5) History.
- (6) Geography.

French:
- (7) Unseen translation.
- (8) Composition and grammar.

English:
- (9) Reproduction of story.
- (10) Grammar.

Mathematics:
- (11) Arithmetic.
- (12) Algebra.
- (13) Geometry (or Euclid).

Greek or German (voluntary):
- (14) Unseen translation.
- (15) Composition and grammar.

Latin verse or nature study (voluntary).

CHELTENHAM COLLEGE.[1]

The school contains a senior and junior department. The studies of the junior department are so arranged that it may serve as a preparation for the senior department. The senior department is divided into three sides, classical, military and civil, and the modern side. The boys of the modern side start by taking all the subjects of the classical side, except that they substitute German and extra French for Greek. As they rise in the school the number of their Latin lessons is gradually reduced in favor of more mathematics, science, etc., until, in the upper fifth and sixth forms, they are able to specialize in modern languages, mathematics, science, or engineering.

[1] The particulars relative to Cheltenham are derived from statements furnished to this office by the principal of the college, Rev. Canon Reginald Waterfield, M. A.

Table of lessons for classical and modern sides, Cheltenham College.

[The numbers show the number of lessons per week. The letters affixed indicate the lessons that are alternative, i. e., anything marked "A" is alternative with anything else marked "A" in the same column.]

Subjects.	Division IV.				Division III.				Division II.			Division I.	
	Forms 1 and 2.		Form 3.		Form 4.		Lower 5.		Upper 5.		Special 5.	Special 6.	Classical 6.
	Classical side.	Modern side.	Classical side.	Modern side.	Classical side.	Modern side.	Classical side.	Modern side.	Classical side.	Modern side.			
Divinity (including Sundays)	2	2	2	2	2	2	2	2	2	2	2	2 1	3
English (composition, literature, geography, extra divinity)	5	5	3	3	3	3	3	3	2	2	2	A 2	5
History	2	2	2	2	2	2	2	2	2	2	2	2	
Extra English or history									2 B	B 2	B 2	B 2	
Special history									2 B	B 2	B 2	B 2	
Special history									2 G	C G	C D G F	C D 2 ea. G F	
Latin	6	6	7	7	6	6	6	5	5	5	3	3	8
Extra Latin	3	3			2				2	A 2	F 2	H 2	
Latin verses							2 K		2 G				
Greek			6		6		6		6		E 2	D 2	8
Extra Greek											D 2	E 2	
Greek verses									2 B				
German				4		4		4		4	E 2	E 2	
Extra German											D 2	D 2	
Special German										A 2	A 2	A 2	
French	3	3	3	3	3	3	3	3	3	3	3	2	2 (or special classics).
Extra French	2	2		2		K 2		K 2	2 G	G 2	G 2	G 2	
Special French								1			F 2	F 2	
Mathematics	5	5	5	5	5	5	5	5	5	5	5	5	5 (or extra classics).
Extra mathematics						2		2		C 2	C 2	C 2	
Special mathematics (*a*)									2 G	G 2	G 2		
Special mathematics (*b*)											D 2	D 2	
Special mathematics (*c*)											E 2	E 2	

Table of lessons for classical and modern sides, Cheltenham College—Continued.

Subjects.	Division IV.				Division III.				Division II.			Division I.	
	Forms 1 and 2.		Form 3.		Form 4.		Lower 5.		Upper 5.		Special 5.	Special 6.	Classical 6.
	Classical side.	Modern side.	Classical side.	Modern side.	Classical side.	Modern side.	Classical side.	Modern side.	Classical side.	Modern side.			
Chemistry or general science	2	2	2	2	2	2	2	2	2 B	B 2	B 2	B 2	
Extra chemistry or science						K 2		K 2		A 2	A 2	A 2	
Special chemistry (*a*)											E 2	E 2	
Special chemistry (*b*)											D 2	D 2	
Physics											F 2	F 2	
Extra physics											G 2	G 2	
Special physics												H 2	
Drawing	1	1	1	1	Special work for examinations.						A C G	C F G	

NOTE.—Engineering in school may be substituted for the lessons marked "extra" or "special," except in Division IV.

DULWICH COLLEGE.[1]

Organization.—The college is divided into the senior and junior sections, and as a boy rises to a higher place in the senior section, he has an increasing opportunity of devoting his time to special subjects.

The senior school is divided into four sides: Classical, modern, science, and engineering.

Boys on the classical side follow the ordinary classical routine, which is intended mainly as a preparation for professional life and for the universities.

Boys on the modern side are taught chiefly mathematics, modern languages, and science. Arrangements are also made on this side for teaching Latin to those who contemplate standing for examinations in which it is required.

There are special classes for boys preparing for the army examinations.

The science side prepares boys for the universities, for the preliminary medical examinations, and for examinations where pure science is the main subject. Boys enter for the London University matriculation examination from any part of the school.

The engineering side gives boys who are destined to become engineers instruction in the rudiments of their future profession, and prepares them for the engineer's office or workshop.

The college has been recognized by the Royal College of Physicians and the Royal College of Surgeons as an institution from which boys may enter for the first conjoint board examination in chemistry, physics, and elementary biology. This examination must be passed by everyone who enters the medical profession. This recognition has been obtained with a view of making it possible for a boy entering the medical profession to remain at school until he has passed this examination in the above subjects, which seems advisable for many reasons. It is possible for a boy, if he is sufficiently proficient, to take at the same time the preliminary scientific examination at the London University. A boy who has passed the first conjoint board examination at school obtains a certain remission of fees at the hospitals, and is able to devote the whole of his time at the hospitals to purely professional studies.

Regulations as to age.—A boy is not allowed to remain in the college after the end of the term in which he completes his nineteenth year, or to remain in the junior section after the end of the term in which he completes his sixteenth year, without special permission.

[1] The particulars given are derived from announcements of the college for 1911.

Hours for the modern side proper.

Forms or classes.	English.	French.	German.	Science.	Latin.	Mathematics.	Divinity.	Drawing.
Lower IV, Upper IV, Lower V	5	5	6	2	2	5	1	1
Upper V	5	5	5	3	3	5	1	0
Remove, Sixth	6	5	5	5	0	5	1	0

DEVELOPMENTS IN SECONDARY EDUCATION IN SCOTLAND.

The changes taking place in the secondary schools of Scotland are similar to those in the high schools of our own country. Special efforts are made by the Scotch Education Department to encourage the teaching of modern languages and the provision of equipment for practical instruction in science, with the result that modern sides are rapidly developing in the secondary schools.

According to the official report for 1909–10 the supply of centers of secondary education is now about complete for the country. These centers, the report says—

> have not been selected in any arbitrary manner according to a prearranged scheme for covering the country as a whole. They represent a natural outgrowth, and yet they are, as a matter of fact, well distributed, and do bring the opportunity of secondary education within reach of practically every capable child in Scotland. That this should have been achieved without artificial stimulation is a most satisfactory feature.
>
> It is not, of course, the case that every child has a center of higher education within convenient walking distance of his home. Such an ideal is impossible of realization in a country containing so extensive a series of thinly populated districts as Scotland does. But the establishment and maintenance of a sufficient number of well-equipped and well-staffed centers placed in suitable situations has had as its complement and corollary the institution of a bursary system on a scale ample enough to render it certain that, where transference is inevitable, a lack of means will not be an obstacle. The Act of 1908 empowered the secondary education committees to make payment out of the district funds of such sums as they deemed necessary to enable properly qualified pupils to proceed from primary to intermediate or secondary schools. And the committees have not been slow to avail themselves of the opportunity. The estimated expenditure upon bursaries by the secondary education committees from the district fund alone has been, during the financial year just ended, £84,800. If to this be added an approximate expenditure upon bursaries of £65,000 from separate endowment funds administered by the committees or by the governors of the endowments a total of £149,800 is reached.

In the most sparsely populated parts of the country the transportation of pupils at public expense is the only alternative to providing at great cost an increased number of secondary centers; in districts which are not easily accessible to an organized intermediate or a secondary school preparation is offered in the elementary schools by which apt pupils are enabled to enter the second or even the third year of the center school.

The increasing complexity of the problems of secondary education, with the consequent necessity of readjustments, was emphasized during the year by a congress on secondary education called at Glasgow University May 13, 1911.

The relation between secondary schools and universities, which has always been closely maintained in Scotland, was a prominent subject of discussion, and the promotion of even closer relations was advocated. The conditions bearing upon this particular point were briefly rehearsed by Mr. Fyfe, chairman of the congress, whose presentation of this subject was reported as follows:

> For nearly 20 years—that is to say, since the foundation of the leaving certificate and the establishment of the preliminary examinations—secondary has been marked off from university education, to the great benefit of both. Indeed, there is perhaps no more marked feature in the history of Scottish education during these years than the enormous advance that has been made in secondary education, not only with regard to its standard and quality, but also to the number participating in it.
>
> But while it is generally admitted that the two agencies to which I have just referred have done great things in the past to standardize and elevate secondary school education and to delimit the scope of its operation, the question is now being asked whether the preliminary examination, in its present form, and particularly in relation to secondary schools, should not be revised. Under the benevolent despotism of the education department, well-balanced courses of related studies have been, or are being, substituted for detached and isolated subjects taken in an unconnected and haphazard way. The modern tendency in school education is to look to general fitness rather than to special knowledge in particular subjects. Therefore, it is the opinion of many, that the link between the university and the secondary schools would be greatly strengthened if the university were prepared to accept the new school leaving certificate, based, as it presumably will be, on the satisfactory completion of a broad and generous course of secondary education, tested and appraised on the general lines of the *abiturienten examen* of the German universities as a guaranty of general fitness to begin any of the higher studies which the university provides.

The idea thus advanced met with approval in the congress, and it was eventually embodied in a motion submitted by Dr. John C. Kerr, vice president of the secondary association. The motion was as follows:

> That the congress, while recognizing the advances which have been made in secondary education in Scotland, affirms its conviction that the realization of the ideals of the primary schools on the one hand, and of the universities and central institutions on the other, is dependent on a generous conception of the treatment to be accorded to the secondary schools in respect of maintenance, organization, and control.

In support of the motion Mr. Kerr, a high authority on educational conditions in Scotland, called attention to the effects of recent movements upon secondary schools. Among these he noted, in particular, the important fact that the secondary schools are now providing primary teachers, and therefore the character and aspirations

of these schools have a vital influence on the education of the people as a whole. The secondary school, however, he declared, had more to do than the training of future teachers, nor was its main purpose to eliminate and select and prepare for university work. "It has to give an environment in which our youth may 'find themselves' and be helped to discern how their highest possibilities may be realized." This involves "a liberal conception of the curriculum and of the methods of classification." A liberal treatment of maintenance was needed, Mr. Kerr maintained, "if for no other reason than that ability could not be obtained without good salaries. The liberal conception of control which appealed to them involved freedom to work within the law." He acknowledged "the lofty ideals of the central authority and the able, earnest, self-denying work of the local authorities," but in his opinion there was "a risk that the intricate machinery which had been evolved for educational reforms was becoming dangerously dominating." He emphasized the point by quoting the words of the late Prof. James, "When a living want of mankind has got itself officially protected and organized in an institution, one of the things which the institution most surely tends to do is to stand in the way of the natural gratification of the want itself."

The efforts for promoting a liberal conception of secondary education have culminated in a proposition, now before the education department, for replacing the single scheme of examination for the leaving certificate, which marks the completion of a full secondary course, by schemes for several orders of leaving certificates. The following courses have received the indorsement of many of the leading schoolmasters of Scotland, and with some modifications would, it is believed, be approved by the university councils.

SAMPLE POST-INTERMEDIATE COURSES.

[N. B.—The subjects in italics in each course are those in which the pupil specializes.]

A. *Language courses:*
English.
History.
Latin, Greek, French, German. } Any two.

B. *English and history courses:*
English.
History.
Latin, Greek, French, German. } Any one.
One other university (arts) subject.

C. *Mathematical and science courses:*
English.
Mathematics, or *mathematics* and *natural science.*
Physical science.
Another language.

D. *Commercial courses:*
English.
A modern language.
Economics and *economic history.*
One other university (arts) subject.
E. General course (for pupils who do not intend to specialize):
English.
History.
Mathematics or science.
Another language.

With respect to this typical scheme Principal A. P. Laurie, of the Heriott-Watt College, Edinburgh, says:

Perhaps the most interesting fact to notice about these groups is that it is possible, in more than one of them, to leave out the study of Latin altogether. The proposal is therefore definitely made that a boy should be able to enter the university not only for a medical, scientific, or technical course, without Latin, but also that he should be able to enter upon his course for the degree of M. A., without Latin. * * * It is worth noting the reasons that are given why these head masters have come to this decision. They point out that under the present regulations of the university it is possible for a student to take the M. A. degree without including among his subjects the study of Latin, and consequently that the only demand made upon him is that he should pass an examination in Latin at the university preliminary examination of a standard no higher than the pass in Latin required by the Scotch Education Department for the intermediate certificate. That is to say, that the university on the one hand requires from the student for the M. A. degree an amount of Latin that can be easily learned by a boy who ceases to study the subject after the age of 15, and that it requires no more. Under these circumstances, these head masters think it would be far better to make Latin optional. It is unlikely that the universities will accept this suggestion, but it is significant of the general tendencies underlying secondary education in Scotland that such a proposal should be made by those in responsible positions.

The survey of current educational events in Great Britain shows a movement of transformation and expansion extending over both divisions of the Kingdom. In England the movement is disturbed by conflicts of opinion which are suppressed for the moment by the general belief that a resettlement of essentials simply awaits the results of the recent crisis in Parliament. The enlarging conception of education as a factor in industrial efficiency and a bond of union between peoples is even more marked in England than in Scotland, partly perhaps because it is a doctrine to which England has been lately converted. It was signally emphasized by the Imperial Education Conference.

THE MODERN MOVEMENT IN THE UNIVERSITIES.

UNIVERSITY ATTENDANCE, DECADE 1900–1910.

Table 11, which brings into comparative view the attendance at the universities of Great Britain for the decade 1900 to 1910 forms, as it were, an index to three distinct eras in the progress of higher

education in the island Kingdom. Oxford and Cambridge and the universities of Scotland, separated in their origin by many centuries from the later universities, have borne an important part in modern progress and have in turn been modified or invigorated by modern influences. Durham University, founded in 1832, was the pioneer in the movement for providing the north of England with university facilities, and, although the original Durham College followed closely the curricula of the older universities, the claims of the technical professions were recognized by temporary provision as early as 1837. By the incorporation of the Medical College of Newcastle, in 1852, and the North of England Institute of Mining and Mechanical Engineering, in 1874, this university was brought into the sweep of the modern movement.

The University of London was created as an examining body in 1837 as a protest against the religious restriction which prevailed at Oxford and Cambridge until 1854. The new university stood, therefore, from its beginning for the full meaning of the modern movement—expanded curriculum and universal opportunity.

TABLE 11.—*Attendance at universities of Great Britain at specified dates.*

Universities.	Students.				
	1901	1903	1905	1907	1910
ENGLAND.					
The ancient universities:					
Oxford (22 colleges, 3 halls, and noncollegiate students)	3,481	3,570	3,648	3,742	3,877
Cambridge (17 colleges, 1 hostel, and noncollegiate students)	2,958	2,900	3,054	3,463	3,726
Total	6,439	6,470	6,702	7,205	7,603
Universities founded in first half of the nineteenth century:					
Durham (3 colleges)	590	1,831	870	926	1,049
London [1]	6,889	6,083	8,287	7,141	9,263
Total	7,479	7,914	9,157	8,067	10,312
The modern universities:					
Birmingham	677	814	850	848	984
Bristol	----	----	----	----	543
Leeds	----	842	833	815	933
Liverpool	----	667	790	914	914
Manchester (Victoria)	2,404	1,914	1,152	1,432	1,554
Sheffield	----	----	512	676	885
Total	3,081	4,237	4,137	4,685	5,813
WALES.					
University of Wales (3 colleges)	1,428	1,495	1,383	1,301	1,552
SCOTLAND.					
Aberdeen	755	814	830	862	924
Edinburgh	2,929	2,990	3,165	3,278	3,366
Glasgow	2,013	2,178	2,364	2,580	2,709
St. Andrews (3 colleges)	419	546	502	531	561
Total	6,116	6,528	6,861	7,251	7,560

[1] A federated body comprising in 1901 a total of 23 colleges and schools; in 1910 a total of 31 institutions.

DEVELOPMENTS AT OXFORD AND CAMBRIDGE.

The popular demands for education which in England marked the latter half of the nineteenth century were felt in the older universities. In response to this impulse extension lectures were started by Cambridge in 1872, followed in 1877 by similar action on the part of Oxford. The scheme of examinations for secondary schools and scholars, the encouragement given by the two universities to the higher education of women, and the provision made by them for noncollegiate resident students bore witness to the strength of the popular movement. New scholastic aims were also encouraged by the institution of diplomas for the promotion of research in special subjects, of which recent examples are diplomas in forestry, public health, education, and economics. Before the nineteenth century closed, all these activities were in full operation, and as the social and scientific interests to which they pertain have assumed more and more definite character and purpose they have, in turn, reenforced the modern departures in the older centers of learning. This reflex influence is plainly seen in the scheme for the reform of Oxford proposed in 1909 by the chancellor, Lord Curzon. Apart from the internal affairs of the university itself the proposals bear upon three subjects of more general importance; the first of these subjects relates to the extension work of the university. The time is opportune for giving more definite organization to this service on account of the changed attitude of the working classes toward the university; more and more they are looking to it for economic and civic instruction. This is plainly indicated by the relation with the Workers' Educational Association which was formed at Oxford in 1903. Through the efforts of this association above 1,300 organizations desirous of promoting the education of the working classes have been federated and their independent efforts coordinated to some degree. The greatest achievement of the association so far is the establishment under Oxford's lead of what are known as tutorial classes. Beginning with 8 Oxford classes in 1908, the number was increased to 12 in 1909, and only lack of funds has prevented further increase. Cambridge, London, and all the local universities have joined in the work, bringing the total number of the classes to 63 in 1910, with 2,000 students.

The tutorial classes differ essentially from the old form of university extension work. They are limited in each case to groups of about 30 students, and every student is bound to attend for a full course of 3 years. Every class meets once a week during 24 weeks for a two hours' session. The first hour is devoted to a lecture, the second to a discussion of the principal points presented. The class exercise is supplemented by reading and the preparation of theses. Thus continuity and concentration are insured. The choice of tutors is in the hands of a tutorial class committee on which both the Workers'

Educational Association (W. E. A.) and the respective universities are represented. All the arrangements for the classes, times and places of meeting, books to be used, fees, etc., are also made by the committee.[1]

In November, 1910, the proposal to make Greek optional at "Responsions" (the equivalent in Oxford of entrance examination) was rejected by "Congregation," the vote standing 188 to 152. In May, 1911, the proposition was again submitted to "Congregation" and carried by a vote of 153 to 79. The privilege of omitting Greek was intended only for students who enter for degrees in science and mathematics. On November 28 the statute was rejected by Convocation, the final court of appeal, by a vote of 595 in a total of 955.

The slowly advancing position of women students at Oxford is indicated by the statute which came into effect in October, 1910, establishing a "Delegacy for the control of resident women students. The names of all women students in residence who are candidates for university examinations must be presented to the university by a 'recognized society' and entered on a register by the delegates." This measure has no relation to the discipline or control of students; it is the first official recognition by the university of the presence of women students.

It may be recalled here that provision is made for women students at Lady Margaret Hall, Somerville College, St. Hugh's College, and St. Hilda's Hall, which, like Newnham College and Girton College, Cambridge, have no organic relation to the university. The students resident at these four colleges, numbering in 1911 about 600, are admitted to lectures at the two universities and also to examinations, but not to degrees. The large number of the women students from the colleges named who applied for degrees at Trinity College, Dublin, after that foundation threw open all its privileges to women, gave a new impulse to the movement for securing the same privilege for women at Oxford and Cambridge. Meanwhile Dublin University adopted a statute (1907) restricting its degrees to resident students.[2]

At Cambridge University reforms are discussed, though less openly than at Oxford and, as a rule, with more restricted reference to the administration and business affairs of the university. In a current review of these discussions, two subjects of general interest are emphasized, namely, degrees for women and compulsory Greek. With respect to the former, the reviewer states that the time is not ripe for reopening the question. With respect to compulsory Greek he says:

> The time has already arrived for a satisfactory settlement of this question. The university can not compromise her reputation for humanity and sincerity by granting

[1] See Oxford and Working-class Education; Oxford, The Clarendon Press, 1908. Universities and the Education of the Workers; The Oxford Magazine, Vol. XXIX, Nos. 5-8. Board of Education (England), special report on certain tutorial classes in connection with the Workers' Educational Association, 1910.

[2] See Education in Ireland, Rept. of Commissioner of Educ., Vol. I, 1910, p. 574.

a degree in arts to Greekless students, but the solution lies along a bifurcation of studies. There are at present at least two bachelor degrees—in law and medicine—which are taken along with the B. A. In future it will be necessary to add to these a bachelor of science, open to the mathematician as well as to the man of science strictly so called, but with the difference that with it the B. A. will only be taken by those students who have originally passed the classical part of the previous examination. Those who are unable to manage the Greek will be content with the B. Sc., which will lead to the M. Sc. and membership of the Senate, just as the B. A. leads to the M. A., and that without, of course, additional expense. At the present time the degree of LL. M. is in every way equivalent to that of M. A.[1]

The position of Cambridge University as a "world center" of mathematical and physical research was emphasized during the present year by the publication of a volume giving a history of Cavendish Laboratory from the date of its establishment in 1871 to the present time. In that period of 40 years the laboratory has had three directors, all men of great distinction in the physical sciences. The first of these, J. Clerk-Maxwell, filled the position from 1871 till his death in 1879. He was succeeded by Lord Rayleigh, who retained the position until 1884, when he retired, pursuing his researches thenceforth in his private laboratory. During his incumbency regular courses for students were established and women were admitted to the laboratory.

The successor of Lord Rayleigh was Prof. Joseph John Thomson (now Sir Joseph), who completed 25 years of service in the position in 1909. It was to commemorate this term of service, distinguished by brilliant achievements, that the history of the laboratory was prepared by his colleagues.

THE UNIVERSITY OF LONDON.

The constitution of a teaching university for London is one of the most important events in the past decade. As an examining and degree-conferring institution the University of London dates from the charter of November 28, 1836. On the same day a charter was granted to University College, which was intended to provide for students desirous of matriculating for the university degrees. Kings College, founded in 1829, was also named in the university charter, together with several other colleges, as institutions whose students might present themselves for the degree examinations of the new university. In 1858 these examinations were opened to a great number of nonresident students, both men and women, and a London degree became a coveted sanction for many of the most aspiring and able students in Great Britain. By the University of London act of 1898 this examining body was transformed into a complete university, and in 1900 entered upon the larger responsibility of organizing and exercising the highest order of teaching.

[1] Gaselee, Stephen. Cambridge University Reform. Contemporary Review, 1911, No. 543 (March), pp. 330–331.

Through the principle of federation, which is working great changes in many parts of the British Empire, colleges and research centers hitherto existing as isolated units have been combined in one system. At the inception of the idea the interests of the metropolis, with its population of seven and a half millions, were uppermost, but these are already overshadowed by the sense of imperial relations.

The university corporation includes at present no less than 15 teaching colleges and 13 medical schools, whose studets are classed as "internal." In addition to these there are several institutions having teachers recognized by the university and students preparing for the London examinations. In this second group are included about a dozen polytechnics, seven training colleges for teachers, three musical colleges, seven minor medical schools, and a number of pharmaceutical and veterinary colleges. The "external" students are not included in the registration given in Table 11.

The interrelations and privileges of the several members of this assemblage are defined by statute, and while innumerable details are yet to be worked out the formative principles of the organization are already indicated. Among these are the central control of examinations and the concentration of studies. The second principle has determined the present grouping of the federated bodies under eight faculties, namely, arts, law, medicine, theology, science, engineering, economics, and music.

Plans for concentrating the highest order of instruction and research pertaining to each faculty have been discussed, but for the present this subject has been merged into that of a possible recasting of the entire system. This question, which has been constantly agitated since the passage of the act of 1898, was forced to an issue by the adoption of the "Imperial College of Science and Technology," as a school of the university in 1908. The Imperial College was incorporated in 1907 "to make provision for the most advanced training and research in science, especially in its application to industry." Like the university, it is a federated body, including the Royal College of Science, the Royal School of Mines (originally maintained by the Science and Art Department), and the City and Guilds of London Institute, the latter supported by the city and the ancient guilds, henceforth to be known as "City and Guilds College."

It has been strongly urged that the Imperial College should be made an independent center for coordinating the various agencies equipped for the study of scientific problems in their bearing on industry. Thus Dr. Glazebrooks, the director of the National Physical Laboratory, in a recent address advised that the Imperial College should "possess the power itself of granting degrees in technological science to its students who have gone through its course and passed the proper tests without reference to any external academic body."

As a consequence of opposing views, a royal commission was appointed in 1909 to examine into the federation system and into other facilities for higher education in London, with a view to advising desirable changes in their organization. It may be said, therefore, that the present University of London stands for a conviction and a purpose which have not yet been cast into permanent form.

THE LOCAL UNIVERSITIES.

The local universities of England, like the national system of elementary education, are the outcome of democratic impulses and industrial needs. They have been formed in part by the federation of technical schools, scientific institutions, and university extension centers; their history as universities belongs almost entirely to the first decade of the twentieth century. Exception may be made of Victoria University, Manchester, which received a charter in 1880, the constituent parts being Owens College and the Royal School of Medicine, both in Manchester. To these were added later University College, Liverpool, and Yorkshire College, Leeds. The former was incorporated with the University of Liverpool in 1903, and the latter was chartered as an independent university in 1904. As a consequence of these changes a new charter was obtained in 1903 for the Victoria University of Manchester, which, therefore, as at present constituted belongs to the decade covered by the table.

The purposes in higher education which Victoria University emphasized from the first, namely, those of service in the industrial world and of benefit to the physical welfare of mankind, characterize the entire group of modern universities. Their local relations and rapid increase are indicated by the cities whose names they bear and their dates of incorporation. These particulars are as follows: Birmingham, 1900; Bristol, 1909; Leeds, 1904; Liverpool, 1903; Sheffield, 1905.

Like Victoria University, the University of Leeds was formed by the union of an existing scientific school—Yorkshire College—which dates from 1874, and the Leeds School of Medicine, founded in 1831. The nuclei of the other members of the group were also preexisting local societies and institutions, so that the university organization in each case is the outcome of experience and matured plans. Situated in great manufacturing and commercial centers, the courses of study maintained by these universities have been planned to meet the demands of their environment, and while offering a modicum of classical studies they give large place to modern languages and sciences and to the various branches of engineering, technology, and agriculture. The technological department of the University of Manchester is the most highly developed in England. At Leeds, the

center of the wool industry, attention is given to mechanical engineering and industrial chemistry. Special provision is made by several institutions of this group for commercial training, and the University of Birmingham comprises a separate faculty of commerce.

By reason of their origin these universities have naturally kept in close relation to the public elementary schools and have recognized the training of teachers as an important part of their work. For this, among many reasons, their facilities are open to women on the same terms as to men. The standard of their education departments was set by Owens College, Manchester, in which a chair of education, the earliest in England, was endowed in 1900. The first to occupy the chair was Mr. H. L. Withers, a graduate of Oxford, who gained great distinction as a teacher and organizer. The vacancy caused by his sudden death was filled by Dr. J. J. Findlay, well known by his writings on education. Subsequently a professorship of the history and administration of education was established, to which Dr. Michael E. Sadler was appointed.

At the outset these modern universities were more concerned in reaching the classes of students who were eager for their privileges than in the mere question of standards, and in pursuance of this purpose made liberal provision for evening classes. Their present scope is indicated by the following table, which includes also the local colleges and the colleges of London University participating in the annual grant made by Parliament for "universities and university colleges" in England. The table includes, further, the constituent colleges of the University of Wales, which also receive annual appropriations from the public treasury.

TABLE 12.—*Statistics of universities and university colleges in England and Wales partly supported by Parliamentary grants, 1909–10.*[1]

Name of university or college.	Full-time students.								Total of part-time students.	Income.			Total expenditure
	Degrees.			Diplomas (nongraduate).			Post-graduates.	Other students.	Total of full-time students.		Total.	From treasury grants.	
	Training college students.	Other students.	Total.	Training college students.	Other students.	Total.						Amount.	Percentage of total income.	
ENGLAND.														
Birmingham University	113	414	527	134	81	215	30	50	822	136	£57,143	£16,541	28.9	£69,780
Bristol University	57	197	254	195	91	286	14	4	558	296	27,372	5,271	19.2	23,726
Leeds University	141	285	426	6	106	112	20	148	706	497	50,388	15,673	31.1	55,631
Liverpool University	251	432	683	4	185	189	123	13	1,008	468	70,181	16,811	23.9	70,035
Manchester University	204	736	940	55	110	165	155	154	1,414	818	79,092	18,153	22.9	79,101
Sheffield University	79	123	202	1	67	68	6	69	345	1,997	43,241	12,119	28.0	41,721
London University:														
University College	90	406	496	.....	71	71	152	178	897	1,306	53,179	11,534	21.7	53,453
King's College	88	264	352	.....	137	137	43	14	546	2,363	39,376	10,230	26.0	40,405
Bedford College	45	143	188	.....	18	18	29	10	245	119	14,656	4,990	34.1	14,526
School of Economics	.....	70	70	.....	1	1	32	80	183	1,443	12,273	2,900	23.6	10,980
East London College	46	110	156	.....	.....	.....	2	.....	158	391	6,377	1,707	26.8	13,987
Durham University:														
Newcastle, Armstrong College	90	161	251	110	48	158	6	102	517	915	29,200	12,776	43.8	31,239
Nottingham University College	61	65	126	90	24	114	3	.....	243	1,676	21,002	8,804	41.9	22,487
Reading University College	54	61	115	76	51	127	11	71	324	787	19,795	7,569	38.2	21,611
Southampton, Hartley University College	42	46	88	106	9	115	5	.....	208	513	11,159	4,713	42.3	10,513
Total—England	1,361	3,513	4,874	777	999	1,776	631	893	[2] 8,174	[3] 13,725	534,439	149,795	28.0	559,204
WALES.														
University of Wales:														
Aberystwyth University College	140	297	437	.....	8	8	11	15	471	248	19,920	11,626	58.4	19,999
Bangor University College	113	167	280	.....	11	11	15	10	316	34	20,794	12,716	61.2	18,512
Cardiff University College	186	288	474	.....	68	68	5	29	576	53	25,170	10,890	43.3	26,891
Total—Wales	439	752	1,191	.....	87	87	31	54	1,363	[2] 335	65,886	35,232	53.5	65,404

[1] Board of Education. Report for year specified.

[2] Day students.

[3] Of these, 5,376 were day students.

Of the total grants from the treasury, £185,027 (about $900,000), nearly 24 per cent was allowed for the training of teachers of elementary and secondary schools. This work is carried on in accordance with regulations issued by the board of education. The total includes also a small amount, £6,800 ($34,000), from the board of agriculture for researches pertaining to agriculture in several of the institutions.

From a detailed statement of the incomes of the colleges included in Table 12, it appears that in the case of the English colleges 33 per cent of their total income is derived from fees, about 15 per cent from endowments, 14½ per cent from local authorities, and 28 per cent from the public treasury. In the case of the Welsh colleges, 25 per cent is derived from fees, about 6 per cent from endowments and the same proportion from local authorities, and 53½ per cent from the public treasury. There remains about 10 per cent in each case to be supplied by private donations.

The board of education, in its latest report on the university and university colleges, dwells upon the difficulty of securing private funds for the promotion of higher education in England. During the current year University College, Reading, has been singularly favored in this respect, an endowment fund of £200,000 ($1,000,000) having been presented, with the object of transforming the college into a university. Among other bequests for the current year are £30,000 to the University of London from the estate of Sir Francis Galton, for a department of national eugenics; £35,000 for mechanical engineering at Liverpool; and £30,000 to the same university for the endowment of a professorship of chemistry. The "City Companies" of London have given, as usual, large sums for promoting scientific research. Notwithstanding these donations, the official report notes that England is behind other countries in respect to the endowment of education by private benefactions. It calls attention to the fact that—

> within a year of its foundation the Kaiser Wilhelm Society for the Promotion of Science in Germany had at its disposal a capital of half a million sterling, which is being devoted to the equipment of institutes at which men already eminent in their respective subjects will be installed. In France Monsieur Auguste Loutreuil left a sum of £284,000 toward the promotion of science in that country. In the United States Mr. Rockefeller handed over the sum of £764,000 to the Rockefeller Institute for Medical Research, which he had previously endowed with large sums.

The importance of the universities in the increasing scope of public education and of national responsibility in the matter has been recognized by the recent establishment of the Universities Branch of the Board of Education, which was organized in April, 1910. Mr. H. F. Heath, director of special inquiries and reports, was appointed

to the office of principal assistant secretary for the new division. In respect to this special division it is officially stated—

that the technological and professional instruction (including the training of teachers for elementary and secondary schools) given by the universities and aided by grants from the board could not be properly dealt with as part of the ordinary administration of the board as applied to institutions which have less autonomy, responsibility, and prestige than the universities. The universities need the greatest possible degree of freedom in organizing and carrying out their important national and international functions.

THE QUINCENTENARY OF ST. ANDREWS.

The most interesting event of the year in university circles of Scotland was the celebration of the five-hundredth anniversary of the foundation of the University of St. Andrews. As set forth in the university calendar:

In the year of our Lord 1410, after the Feast of Pentecost, a university had its beginning in the city of St. Andrews of Kilrymont in Scotland, in the time of Henry de Wardlaw, Bishop, and James Biset, Prior of the same St. Andrews. A year and a half later, on 28th February 1412, Bishop Wardlaw, one of the best and wisest statesmen of the old Scottish Church, granted a charter of Foundation. The Bishop and his Chapter petitioned Pope Benedict XIII for confirmation of the Charter, and King James I, then a prisoner in England, and afterwards a wise patron of the University, which he honoured with the title of his "beloved daughter," warmly joined in their request, and with such effect that on 28th August 1413, at Peñiscola in Spain, Benedict XIII confirmed the charter by several Bulls. These were duly taken to Scotland by Henry Ogilvy, Master of Arts, whose arrival in St. Andrews on 3rd February 1414 was hailed with joy by all classes of the citizens.

It is further recorded that—

from 1410 to the present time, amid many changes in Church and State, the University has carried on its work without a break.

In the arrangements for the centennial celebration efforts were made to emphasize the historic traditions of the university, especially as related to the ancient colleges of St. Salvator, founded in 1450; St. Leonard's, founded in 1512; and St. Mary's, founded in 1537, all included in the university corporation.

The relation of the university to the municipal life of the ancient city was also kept in mind, and in view of the fact that it is the oldest seat of learning in Scotland it was determined to make the assembly on this occasion "widely representative of Scotland and Scotsmen," as well as the means of drawing together representatives of the principal learned societies and universities of the Old and the New World. These arrangements, as described by participants, were carried out with great effect.

The principal academic events of the celebration, which occupied four days, were as follows:

September 12.—The presentation of his portrait to Mr. Carnegie.

This was a gift of the students, senate, and university court in recognition of their former rector's munificence to the university, for to him it owes, amongst other things,

its fine Carnegie Park, pavilions, library, and gymnasium. The picture represents Dr. Carnegie in his robes as rector. Principal Sir James Donaldson made the presentation on behalf of the subscribers, and Dr. Carnegie made a notable acknowledgment.

September 13.—Commemoration service in Holy Trinity, the ancient town church, recently restored. To this service the officers and students of the university and the great company of delegates marched in imposing procession from the university quadrangle. The afternoon of the same day was occupied by the presentation of congratulatory addresses, to which eloquent response was made by the chancellor, Lord Balfour, of Burleigh.

September 14.—The installation of the rector of the university, who is the chosen representative of the students. The choice had fallen upon the Earl of Roseberry, who now has held the rectorship in every Scottish university. His popularity was evidenced by the vast concourse of people which packed the assembly hall, still leaving an immense number outside. The address of the rector excited great enthusiasm, especially when he counseled the students to maintain—

> that self-reliance, that frugality, that resolute application to work, and that masterful surmounting of difficulties which have made their countrymen thrive even under neglect and have won for them the respect of the world.[1]

The rector's address was followed by congratulations addressed to Sir James Donaldson, on the completion of his 25th year as principal of the university, and by the graduation ceremonies. The honorary degree of LL. D. was conferred upon 90 distinguished graduates, including both men and women, and the degree of D. D. upon 14 men.

September 15.—The closing exercises of the quincentenary were celebrated at Dundee in connection with University College, founded in 1880 by private endowment "to promote the higher education of the commercial and industrial classes," and affiliated to the university January 15, 1897.

These more serious exercises were interpersed with historic pageants and brilliant social festivities.

II. THE STATE UNIVERSITIES OF FRANCE.

In a recent sketch of the French universities, a professor at the Sorbonne says: "Twelve years of autonomous life in the full exercise of their rights and their scientific activity have given assurance of the success and the future of the young French universities." The word young is significant, since the independent life of the universities dates from the law of 1896; but in a sense, thus reconstructed, they are revivals of the universities of ancient France, and in the vigor and pride of their new life they cherish the traditions and the memorials of a glorious past.

[1] See Nature, Sept. 21, 1911, p. 387.

It is proposed to consider here evidences of the progress of these institutions during the past decade, as disclosed in official reports and in the current literature of the subject, and confirmed by direct inquiry and correspondence on the part of this office.[1]

INCREASE IN THE STUDENT BODY.

First among the signs of progress to be noted is the increase in the number of students. As shown by Table 13, this increase has been steady and marked during the decade, excepting in the case of one or two of the universities. At these smaller centers a process of scholastic specialization has been going on which promises to give them distinctive place in the general system.

TABLE 13.—*Distribution of students in the State universities of France for the years specified.*

Universities.	Number of students.			
	1901 [1]	1905 [2]	1907 [3]	1910 [4]
Paris	12,289	13,431	15,789	17,602
Aix-Marseille	950	1,150	1,269	1,236
Besancon	252	321	325	242
Bordeaux	2,119	2,433	2,496	2,552
Caen	646	748	814	826
Clermont	299	272	281	275
Dijon	699	902	966	992
Grenoble	566	769	896	1,156
Lille	1,110	1,190	1,560	1,779
Lyon	2,458	2,551	2,783	2,922
Montpellier	1,610	1,779	1,752	1,965
Nancy	1,027	1,540	1,841	1,899
Poitiers	821	888	962	1,299
Rennes	1,139	1,257	1,498	2,029
Toulouse	2,040	2,304	2,675	2,828
Schools of medicine and pharmacy not included in the universities	1,135	1,025	710	([5])
Alger (university schools) [6]	771	1,058	1,580	1,442
Total	29,931	33,618	38,197	41,044

[1] Report on the budget, ministry of public instruction, 1902, by M. Maurice-Faure.
[2] Annuaire statistique, 1905, p. 65.
[3] Report on the budget, 1907, by M. Maurice-Faure, p. 27.
[4] Report on the budget, 1911, by M. T. Steeg, p. 23.
[5] Included in the universities in 1910.
[6] Organized as a university in 1910.

In the decade covered by the foregoing table the total number of students rose from 29,901 to 41,044, an increase of 37 per cent. For the University of Paris alone the increase was above the average, amounting to 43 per cent; for the provincial universities taken together, the increase was 33 per cent. The contingent of foreign students has contributed in a marked degree to this advance; in 1900

[1] Chambre des Députés, Rapport portant fixation du budget général de l'exercice, 1911 (Ministère de l'instruction publique et des beaux-arts, 1re. section: Instruction publique), par M. T. Steeg, Député. Also corresponding reports for successive years, 1901 to 1910, inclusive.

Liard, Louis, L'Université de Paris. Paris, Renouard, 1909.

Revue internationale de l'enseignement (file 1900–1911, inclusive).

Cazamian, Louis, L'Enseignement supérieur en France [in special reports on educational subjects, issued by the board of education, England, vol. 24].

they numbered 1,770; in 1910, 5,241, a gain of 196.6 per cent during the decade. These numbers pertain to the winter sessions; in the summer sessions the number of foreigners is always greater; for instance, in 1910, it was 5,800, or 559 more than in the winter session of the same year. The numbers quoted relate solely to regularly inscribed students. There is also a large attendance of foreign students at the vacation courses maintained by several universities; in 1909, for instance, they numbered 1,399. Further, no account is here taken of students attending public lectures at the Collège de France, the Muséum, or the Conservatoire des Arts et Métiers. This proof of the extending reputation of the universities affords just gratification to the French authorities, who dwell also upon the evidence that it affects nearly every country. Russia has the largest representation in the student body, and the German Empire, exclusive of Alsace-Lorraine, stands second in this respect.

It is interesting to note that the United States is comprised in a group of nine nations which contribute more than 100 students each. These nations are as follows:

TABLE 14.—*Countries contributing the largest number of foreign students to the French universities for the years specified.*[1]

Countries.	Number of students.		Increase.
	1900	1910	
Russia	397	2,556	2,159
Germany	71	363	292
Roumania	252	330	78
Egypt	75	267	192
Bulgaria	216	254	38
Ottoman Empire	184	232	48
Great Britain	36	197	161
United States	67	123	56
Austria-Hungary	31	133	102

[1] Report on the budget for 1911.

INFLUENCES AFFECTING FOREIGN PATRONAGE.

Among the various interests that draw foreign students to France, the value of the French language as a world medium is undoubtedly greatest; second only to this consideration is that of the facilities offered for scientific study and research, and the logical clearness of French expositions. To these inducements must be added special conditions made in the interests of foreign students; the most important of these was the institution by decree of July 21, 1897, of a university doctorate. The regular French doctorate, it should be explained, is not only a scholastic title but a State diploma, carrying certain professional rights and privileges. The university doctorate

created in 1897, carries full scholastic sanction but confers no civic or professional advantages in France, and, hence, does not place the foreigner in competition with his French comrades, neither does it require antecedent conditions that can be met only by natives. While the matter of the new doctorate was pending, a spontaneous movement led to the formation at Paris of a "Committee of Patronage of Foreign Students," comprising professors, students, and a number of high officials. The committee subsequently established branches in several university centers, its general purpose being to promote the welfare of foreign students by directing them to suitable residences, and in many ways drawing them into social relations. Especially helpful to the foreigners are the courses in the French language maintained by members of the committee. A correspondence bureau is conducted by the committee at Paris, which receives a subvention from the city council. Outside of Paris, the branches at Grenoble, Nancy, and Montpellier have been most active in this social effort.

The attention of American students has been more and more drawn toward the French universities by the system of exchange professors, in which Harvard and Columbia participate. By a somewhat similar arrangement very intimate relations have been established between the universities of France and those of Spain and Italy. The *Ligue franco-écossaise* has been eminently successful in exciting cordial sympathy between the student bodies of the two countries; the more recent *Ligue franco-italao-roumaine* has for its special object the promotion of commercial and political relations, but it also increases the intellectual bonds between the three nations. The Franco-American committee, created in 1898, bore a very important part in the efforts that resulted in the special doctorate and has been constantly engaged in the endeavor to interest American students in the facilities offered at the French universities. Following this precedent, a union of the universities and special schools of France was organized in 1908 to establish relations with the Latin-American countries.

During the present year the permanent secretary of the Franco-Latin union made a tour of Mexico, Chile, Brazil, and the Argentine Republic, with the purpose of promoting its interests; and in order to extend the knowledge of these countries in France, the union has founded a library of books and periodicals devoted to this subject. A special review, the *Bulletin mensuel de la bibliothèque Americaine* is maintained by the collaboration of savants of France and of the South American States. The Argentine Government has also created at the Sorbonne a chair of the economic and political history of Argentina.

In this widening circle of influence special interest attaches to the relations formed with the universities of southern Europe. Professors from the University of Bordeaux have at different times given courses of lectures at the Spanish universities, Madrid, Salamanca, Valladolid, Saragossa, and Oviedo, and during the present year Madrid and Oviedo have been represented at Bordeaux. From this intercourse sprang the idea of a permanent organ of intellectual exchange between the two nations, which has been realized by the establishment of the *Institut français* in Spain, through the united action of the Universities of Bordeaux, Toulouse, and Montpellier. In like manner, as a result of the exchange of lecturers and visiting delegates, Grenoble has established an *Institut français* at Florence. Undoubtedly these efforts have been inspired by the example of the long-existing French schools at Rome and at Athens, but the immediate purpose of the recent institutes is the formation of centers of influence and the diffusion of modern science and social doctrines. Thus the French universities are giving practical effect to the movement for international solidarity, long advocated by M. Bourgeois, eminent diplomat and former minister of public instruction.

DISTRIBUTION OF STUDENTS BY FACULTIES.

The universities of France, like those of Germany, are highly specialized institutions in which students are prepared for professional or official careers. General education is the province of the lycées and colleges which prepare students for the bachelor's degree, a prerequisite for matriculation at the universities. The term "university" has, therefore, more restricted and more definite meaning than in the United States, where, under the prevailing influence of English traditions, liberal education forms an important, often the essential, part of the university system. Hence, also, the distribution of students by faculties serves as an index to the changing currents of intellectual life and of university demands in France.

TABLE 15.—*Distribution of students among the different faculties of the State universities of France.*[1]

Faculties.	Number of students in State universities.			
	Jan. 15, 1901.	Jan. 15, 1905.	Jan. 15, 1907.	Jan. 15, 1910.
Law	10,152	12,528	15,551	16,915
Medicine	8,627	8,184	8,297	9,721
Sciences	3,910	5,152	6,349	6,287
Letters	3,723	4,519	5,710	6,363
Pharmacy	3,347	3,134	2,290	1,758
Protestant theology	142	101	.....	.....
Total	29,901	33,618	38,197	41,044

[1] Sources of information as cited for Table 13.

From the distribution of the students among the different faculties, as shown in Table 15, it is seen that law attracts nearly 40 per cent of the entire number, and, further, that the faculty of letters has gained upon the faculty of sciences, which at the beginning of the decade had the larger registration. This increasing attendance upon the faculty of letters is due in great measure to the changing requirements of the teaching force of the secondary schools, which is recruited chiefly from the two faculties considered. Among other causes for the gain in letters is the preference of foreign students. The number of foreigners in the faculties of science rose in the decade from 278 to 1,208, an increase of 334 per cent; in letters, from 215 to 1,708, an increase of 694 per cent. This very large advance justifies the claim on the part of the French authorities that the demand for the language and, as a consequence, the influence of the nation are increasing in the world. The faculty of letters, it may be said, especially the Paris faculty, is a nursery of liberal ideas.

The increased attendance upon the faculties of letters and science is due in part to the system of bourses (scholarship funds) adopted by the Government in the early days of the Republic, with the purpose of assuring a sufficient number of candidates for the teaching service of secondary schools. At that time the faculties were purely examining juries and few candidates were forthcoming for the *licence* (diploma required for regular professorships) or for the *agrégation* (examination for special professors). In order to induce young men of promise, but of limited means, to enter the service, Government bourses were created to be awarded upon competitive examination. The number of candidates admitted to this provision each year is, however, strictly limited, and at present the boursiers form a very small proportion of the entire number of students in the two faculties named.

By the reorganization of secondary studies (decree of May 31, 1902) a road is opened from primary schools to the scientific faculties through the assimilation of the modern course in the lycées to that of the higher primaries. This arrangement was made both in the interests of the teaching service of primary schools and also as a means of enabling ambitious youths among the industrial classes to prepare themselves for more effective service in the practical affairs of life.

The increase in the attendance upon the faculties of law has taken place chiefly in the Paris faculty, which comprises at the present time 38 chairs or full professorships with a large corps of subordinate instructors (chargés de cours et d'agrégés). The Paris faculty registers 7,000 students, or nearly half the number in the law faculties of the 16 universities.

Legal studies in France are the direct preparation for official positions, which explains, in part, the excess of students in the law faculties. An additional cause is found in the recent extensions of the curricula

to provide for new problems of law arising from industrial progress and international relations. In provincial universities, for example, may be mentioned a course in the history of law and of juridical institutions of the East at Nancy, and a course in industrial legislation and economy at Montpellier.

The increase in the attendance upon the medical faculty is relatively less than in the other faculties. This is due largely to the extension of the preparatory studies, with a consequent advance in the entrance requirements, and further to the increased severity of the medical course itself. It may be recalled here, that by a decree of 1893 a special certificate in the scientific studies—physics, chemistry, and natural sciences (the "P. C. N."), as related to the medical course—was instituted, requiring a year's study in a faculty of science. From that time, the need of a complete reform of the medical course itself was urged by professors and physicians, and in 1907 a Government commission was appointed to investigate and report upon the subject. The outcome of their recommendations was the decree of January 11, 1909, providing for radical changes in the course of medical instruction and in the examinations for the diploma. This decree required that all candidates for admission to the medical faculties should have obtained the bachelor's degree. In addition to the preparatory year of study in the faculty of sciences leading to the special certificate in physics, chemistry, and natural sciences (the "P. C. N."), the student of medicine must complete the full five-year course, each year being nine months in duration. Every student is also required to assist at the appointed clinics and to make up the full hospital term.[1]

Complaint is still made that these reforms can not be completely carried out from lack of adequate equipment, especially in regard to laboratory and clinical facilities. In a few centers, particularly Paris, Lyon, and Nancy, municipal appropriations and private donations have contributed materially to this work.

WOMEN STUDENTS.

A noticeable feature of the university record for the decade is the increasing number of women students, their distribution among the faculties, and the nationalities which they represent.

The number and distribution of women students in 1905 and 1909, respectively, were as follows:

Faculties.	1905	1909
Law	37	147
Medicine	689	878
Science	259	803
Letters	838	1,711
Pharmacy	79	57
Total	1,902	3,596

[1] Bulletin Administratif, 1909, No. 1860 (Jan. 16), pp. 37–53.

Thus in four years the contingent of women students was increased by nearly 90 per cent. The total for 1909 included 2,916 native French women. Russia had the largest representation among the 680 foreigners. As to the equality accorded women in university circles, it will suffice to recall the impartial appreciation of their graduating theses, illustrated the present year by the note "very honorable" inscribed on the doctor's diploma accorded to a Polish student, Mme. Lipinska, by the Paris faculty of letters.

SIGNIFICANCE OF THE SPECIAL DIPLOMAS.

As a consequence of the restored independence of the French universities, their energies have been turned more and more to the vital interests of modern life. An index to the growth in this respect is furnished by the special diplomas awarded by the different faculties in accordance with a decree of July 21, 1897. In the last three years alone, 24 of these restricted diplomas have been instituted, representing 12 of the 15 universities, and illustrating by their titles distinguishing specialties of each. Among these recent sanctions are the diploma for special courses in philosophy, history, geography, philology, and the certificate for financial and administrative studies authorized at Paris in 1908; diploma for foreigners in French language and literature, given at Grenoble; diploma of electrical engineer, and a special diploma in agriculture at Toulouse

In this turning of the energies and resources of the universities toward the service of industry, particular prominence is given to the sciences applicable to agriculture. The University of Besançon, for example, maintains a laboratory for agricultural analysis, a laboratory of agricultural bacteriology, and two stations, one for experiments with seeds, the other for the culture of coniferæ and of the most fruitful plants; Bordeaux, with the cooperation of the Departments of the Gironde and Landes and the Chambers of Commerce of Bordeaux and Mont-de-Marsan, has provided special equipment for the study of resin and its industrial applications; the University of Nancy, supplied during the past decade with the finest assemblage of industrial institutes to be found in France, added at the beginning of the present decade an agricultural institute of the highest order. It comprises, as courses of instruction common to all students, agricultural botany, agricultural zoology and zootechnics, and agricultural chemistry and geology, and, as special courses of instruction, economic branches, forestry, physics, and practical agriculture.

OFFICIAL CHARACTER OF THE UNIVERSITIES.

The autonomy conferred upon the universities by the law of 1896 is restricted by their official relations to the Government. The number of professors for each university is determined by law, and

they are appointed by the minister of public instruction, acting in advice with the university councils. The salaries of the professors are fixed by law and paid by the State. The universities are also charged with the duty of conferring the degrees or State diplomas. The bachelor's degree is the goal of "secondary education" and is required for matriculation in the university faculties. The ordinary degrees conferred in course by the faculties are as follows: Faculty of letters and of science, the diploma of licencié and of doctor; also by the faculty of science, the special certificate of scientific studies required for admission to the medical faculty; faculty of law, degree of bachelor, of licencié, and of doctor; faculty of medicine, degree of doctor. The diploma examinations are regulated by official decrees and they practically determine the courses of instruction in the several faculties. The burden imposed upon the professors appointed on the examining juries may be inferred from the number of diplomas annually awarded. For the year 1909, the latest for which the data are available, there were conferred 6,973 diplomas of bachelor, marking the close of "secondary education." The number of diplomas conferred in the faculty courses were as follows: In law, 360 certificates of capacity, 2,291 diplomas of bachelor, 2,201 of licentiate, 559 of doctor; in medicine, 909 diplomas of doctor, 267 of dental surgery, and 360 midwife certificates; in pharmacy, 366 diplomas and 157 herbalist licenses; in sciences, 484 diplomas of licentiate (licencié), 39 of doctor, and 1,370 special certificates (P. C. N.) required in addition to the bachelor's degree for admission to the medical faculties; in the faculty of letters, 531 diplomas of licentiate and 31 of doctor.[1]

The above numbers pertain only to successful candidates who form, perhaps, two-thirds of the total number examined.

UNIVERSITY INCOMES.

In the reports of the financial status of the several universities the receipts are classified as the ordinary and the extraordinary income. The former comprises the revenues from property and the interest of invested funds, the fees for matriculation, lecture fees, library and laboratory fees, the receipts from university publications, the State appropriations for current expenditures, appropriations by the Departments and cities, and all other sources of a permanent character. The extraordinary income includes gifts and legacies, loans, appropriations for building or other special purposes, and all other funds intended to meet temporary demands. Each faculty comprised within a university has its own separate budget. The salaries of all professors are paid from the State appropriations, estimates for the same being annually submitted to the Chamber of

[1] Annuaire Statistique, 1909, p. 59.

Deputies by the minister of public instruction. The university may, however, make arrangements for additional service to be paid for out of its own resources.

In giving up to the universities the receipts from fees, which were formerly turned over to the State treasury, it was decided that they must be applied wholly to objects of immediate advantage to the students, such as the equipment of laboratories, libraries, new buildings, etc. Apart from these specific limitations, the universities have free disposal of their resources.

TABLE 16.—*Comparative view of the income of the State universities of France, 1906, 1909.*[1]

Universities.	1906		1909	
	Francs.	*U. S. equivalent.*	*Francs.*	*U. S. equivalent.*
Paris	6,818,939	$1,363,788	4,725,767	$945,153
PROVINCIAL.				
Aix Marseille	247,522	49,504	277,946	55,589
Besancon	153,903	30,781	146,664	29,333
Bordeaux	1,010,962	202,192	945,734	189,147
Caen	228,255	45,651	127,342	25,468
Clermont	135,082	27,016	136,540	27,308
Dijon	417,834	83,567	242,716	48,543
Grenoble	261,297	52,259	407,966	81,593
Lille	501,939	100,388	454,885	90,977
Lyon	686,488	137,298	672,956	134,591
Montpellier	475,529	95,106	592,819	118,564
Nancy	1,283,048	256,609	1,356,689	271,338
Poitiers	154,370	30,874	180,436	36,087
Rennes	205,065	41,013	190,217	38,044
Toulouse	670,245	134,049	752,774	150,555
Total	13,250,478	2,650,095	11,211,451	2,242,290

[1] See Chambre des Députés: Rapport fait au nom de la commission du budget, ministère de l'instruction publique et des beaux-arts, 1st section, 1911, pp. 199–200; 205–207.

From Table 16 it appears that the combined incomes of the 15 universities in France, excluding Algiers, in 1906 aggregated $2,650,095, of which amount Paris received $1,363,787, or a little more than half the total. In 1909 the amount was $2,242,290, of which Paris received less than half, namely, $945,153. Partial statements for intervening years indicate that the decline in the incomes, total and particular, in 1909, as compared with 1906, is due to fluctuations in the amounts received from gifts, legacies, etc., or what are termed extraordinary sources, rather than to a falling off in the receipts from ordinary sources. The latter include fees and State and local appropriations, which, as a rule, increase from year to year. From official statements for the years intervening between 1906 and 1909 it appears that Paris reached its maximum income in 1908, namely, $1,567,132. This was also the most profitable year for Nancy and Lyon.

It should be recalled in this connection that in the years immediately preceding and following the passage of the law of 1896 the work of providing suitable buildings and equipments for the uni-

versities was pushed with great vigor, and as the need arises special appropriations are made for these purposes. The large sums expended by the municipalities and Departments in aid of these material appliances raised the expectation of liberal support from the same source as the reconstituted universities should develop their local adaptations. In a measure this hope has been realized, but there is still urgent need for increased resources. It is a need which has been repeatedly urged upon the Chamber of Deputies by M. Steeg, who has recently been appointed minister of public instruction.

CENTRAL IMPORTANCE OF PARIS.

The development of the provincial universities of France is an important feature of the recent progress of higher education. It has not only increased the intellectual life of the country, but it has multiplied its scientific forces. At the same time Paris remains the chief center of learning and research. The new Sorbonne, whose completion was celebrated in 1909, endowed the university with an edifice worthy of its ancient prestige and of its renewed vigor. The influence of this central university upon the general system of higher education was increased by the fusion of the École Normale Supérieure with the university, which was accomplished in 1907. The function of this school has been the preparation of a select body of young men for professorships in the higher classes of the State lycées. The candidates are selected by competitive examinations, and their expenses during the four years' training are at the charge of the State. In its new relation the institution serves the university as a professional faculty or "seminar."

The latest addition to the University of Paris is the Aerotechnic Institut, founded by M. Henry Deutsch (de la Meurthe), who donated for the purpose 500,000 francs ($100,000) and an annual income of 15,000 francs ($3,000) for its maintenance during his life. The building erected for this new establishment occupies a site adjoining the drill campus of the military school Saint-Cyr, about 25 kilometers from Paris. It is equipped for researches and experiments bearing upon aerial locomotion, with a constant view to the practical mastery of the art and the perfection of aerial machines. The institut will be under the direction of the dean of the faculty of sciences, of which it is an adjunct. It was officially inaugurated with brilliant ceremony July 8, 1911.[1]

Notwithstanding recent transformations it has proved difficult to overcome the specialized character stamped upon the faculties under the old system, and complaint is made that the universities are still

[1] See L'Institut aerotechnique de l'Université de Paris à Saint-Cyr-l'École. Revue internationale de l'enseignement No. 8, 1911 (Aug. 15), p. 116.

wanting in the true spirit of corporate life. It was in part as a means of correcting the tendency to isolated activity on the part of the Paris faculties that the *École Pratique des Hautes Études* was created by a decree of July 31, 1868. Its purpose, as explained in the decree, is that of "maintaining side by side with the theoretic instructions (given by faculties) the applications which fortify and extend them." The school is divided into four sections: Mathematics, physics and chemistry, natural history and physiology, historical and philological sciences. It has no building of its own nor definite program; but all the resources of the Sorbonne, libraries and laboratories, are at its disposal, and the professors and savants in charge of its sections conduct their little groups of special students to the one or the other of these centers, or meet them in rooms assigned for lectures and conference, as circumstances demand. This arrangement has emphasized the unity of the sciences, but it has not increased the organic unity of the faculties. The sense of this unity has been preserved in some measure at the Paris University by its historic continuity. Similar traditional influences form a bond of union in the provincial universities which is strong in proportion to their ancient renown.

The University of Paris, itself, is the central body in a group of higher institutions devoted to the humanities which are included in Table 17. They are supplemented by technical and art schools of world-wide distinction which pertain to other ministries than that of public instruction. To this public provision for liberal and technical education at the capital is added the most important of the private universities of France, which includes a faculty of Catholic theology. A private faculty of Protestant theology was also established in 1906.

The increasing provision for modern studies at the French capital is illustrated by the École libre des sciences politiques, the Collège des libre des sciences sociales, the École des hautes sociales, and the École de journalisme, all founded within the decade by private benefactions.

Higher education in Paris and, it may be said, in the world, has suffered great loss by the recent deaths of M. Pierre-Emile Levasseur and M. Alfred Binet. The former had very nearly completed his eighty-third year and maintained up to the time of his death those researches which had placed him at the head of social and statistical sciences in France. He was administrative chief of the Collège de France and vice president of the Commission supérieure de statistique of France and also of the Institut international de statistique.

M. Binet was a recognized leader in the field of experimental psychology and the director of the investigations in this subject carried on in the laboratory of the Sorbonne, which are effecting radical changes in the current philosophy of education.

TABLE 17.—*Government appropriations for higher education (ministry of public instruction), 1909.*[1]

Institutions.	For the teaching personnel.	For material.	Total.	United States equivalents.
	Francs.	*Francs.*	*Francs.*	
Universities	11,390,867	2,198,827	[2] 13,589,694	[2] $2,717,938
College of France	299,590	76,860	576,450	115,290
Museum of Natural History	720,690	312,400	1,033,090	206,618
Practical School of Higher Studies	261,000	92,164	353,164	70,632
School of Archives	60,000	14,000	74,000	14,800
Superior Normal School	64,600	204,000	268,600	53,720
School of Living Oriental Languages	153,000	22,300	175,300	35,060
School of Athens	52,700	65,000	117,700	23,540
School of Rome	38,500	34,000	72,500	14,500
Total	13,240,947	3,019,551	16,260,498	3,252,098

[1] The particulars are derived from the statement of the amounts allowed in 1909, as reported in the budget estimates for 1910; submitted in the report to the Chamber of Deputies (Budget général de l'exercice 1910, Ministère de l'instruction publique), by M. T. Steeg, pp. 352–353.

[2] In addition, 801,100 francs ($160,220) were allowed for scholarship funds.

CHAPTER XX.

RECENT MOVEMENTS IN HIGHER AND SECONDARY EDUCATION IN GERMANY.

By Wilhelm Münch,

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The development of the German universities during the last hundred years has undeniably raised them in the eyes of the scientific world, but at the same time it has given rise to practical difficulties which are more and more felt and, here and there, much deplored. German professors regard scientific research rather than teaching as their distinguishing task, or at least their teaching mostly takes the shape of initiation into the methods of research. Their lecturing has thus assumed such an abstract character that the student coming from a higher school in the proud possession of a "certificate of maturity," usually finds the transition to the new atmosphere of thought very hard, and commonly wastes more than one term merely in finding a footing. At the other end, the step from the university into a profession is the reverse of easy; the medical faculty, with its clinical hospitals and similar arrangements, is really the only one which offers a direct training for the future, though the theological, with its homiletic-catechetical seminaries, might be classed with the medical. Only after the portals of the university have closed behind them do law students begin their practical work in a course lasting several years. Aspirants to higher posts in schools long had only one year's preliminary exercise. The need of a more thorough pedagogical training, however, gradually made itself felt; at first, in Prussia, as far back as 20 years ago, and afterwards in other German States a two years' theoretical and practical course was made generally compulsory. Even those States which still hold to the one-year system have made the course much more difficult than before. The universities for their part aim exclusively, or almost exclusively, at merely supplying an introduction to the subjects which are afterwards to be taught in the professional schools. The way this knowledge is applied in the classroom is still apt to be regarded as wholly dependent on native capacity, i. e., something similar to common sense.

A more adequate view of the matter seems, however, to be spreading. In the meantime a year's practical training, complementary to the studies and examinations, has been added to the medical course, and a similar provision has been made for evangelical theology. In the university itself the importance of mental intercourse between the professors and their students is more widely recognized, due to the further development of the university seminaries; even those professors and "privatdocents" who do not conduct official seminaries usually hold so-called "exercises" in addition to their lectures. The throng of students is great on all such occasions; they themselves feel strongly how much less they gain in mental culture from mere listening to lectures.[1] Nevertheless the institution must be regarded as in some respects very incomplete. In many subjects the seminary deals only with strictly scientific questions (from which the themes for dissertations are frequently drawn), whereas more practical discussions are equally desirable. Besides this the number of those admitted is usually rather small, and indeed not unwisely so, because it is only then that a lively debate becomes possible; a too numerous membership easily tends to make the individuals embarrassed and silent. In most cases, too, only those students are admitted who have already been several terms in the university, whereas it is precisely the freshman who is most in need of help. The whole system is in fact capable of much development; for younger lecturers and for older and proved students, a field of useful labor is here opened.

The absence of all unifying personal guidance of the student's course of study is not infrequently felt to be a weakness in German university life, yet few people wish for definite or printed curricula, even if these should be only for the sake of suggestion. Full "academic freedom" proves, as a matter of fact, a benefit only to students of much intelligence and firm character. It was glorified into a principle in a period of idealism, is still defended by the idealists, and, to say the least, presupposes approximately ideal students. But the time is long past when only a small body of young men pressed to the university and when one could generally take mental gifts and independent initiative for granted. The crowds nowadays are growing beyond all calculation, multiplying from one year to another. What wonder if the productivity of the average student decreases on that account. The less gifted spirits demand fuller guidance. Although very few of the scholars in the last class of the higher schools fail in their final examination, four or five years later only the smaller part can show really good results of their independent study. It is in fact only the more distinguished who rise; the ordinary individuals

[1] For instance, the number of those taking part in the seminary exercises of the national economy school in the University of Berlin has risen during the last 10 years from not more than 50 to about 300. These exercises consist of short accounts by the students of appointed subjects, criticisms, and debates; but essays are also written, adjudged, and corrected.

fall back. Some now declare that the lecture system has lived its day and that a method in which dialogue should predominate ought to take its place; others—and such a conspicuous thinker as the late Friedrich Paulsen was among their number—regard the lecture system as the most effective, to be surpassed and replaced by no other. As a matter of fact, it will doubtless remain the preferred form, and reasons for that would not be hard to find. One must not regard the mere listening to a great variety of lectures as the student's main business, especially, as too often happens, when the listening is of a fragmentary nature; much time and strength are thus wasted.

On the whole it is not strange that the demand should at intervals have arisen for a special "academic pedagogy" as a new science. In an age when all questions of preuniversity education are carefully considered and measures taken in accordance, indifference ought not to prevail toward the succeeding years and their educational claims. The academic chair also claims its principles and regulations. There should be no shrinking from a discussion of the problem, for the psychology of the student period deserves an exhaustive observation which it has not yet received. A former privatdocent of Munich, Dr. Schmidkunz, has made the furtherance of this view his mission for some years past, and has won over several important university lights to his Union of Academic Pedagogy (Verband für Hochschulpädagogik). On the whole, however, not much attention is paid to the movement. People are afraid of losing, or at least limiting, the foundation of the fame of German universities, namely, the complete personal liberty of the students and the effect of their being in immediate touch with greater minds.

If it was already hard enough for the freshman to gain a footing in the new mental atmosphere, to understand the abstract language, and to follow the closer line of thought; and if it was at the same time not exactly easy for the professor to find the right way of fascinating the cleverer spirits without repelling the weaker, the difficulty has become still greater for both parties, because pupils have been admitted to the university, not only from the classical schools (humanistischen Gymnasien), but also indiscriminately from the various schools which have a nine years' curriculum.[1] This has been the case in Prussia for the last 10 years and with some variations has been gradually adopted by most of the other German States. The proclamation of the Kaiser, or rather King of Prussia, which approved this innovation (November, 1900), was only the sanction of a resolution passed at a general conference of professional men and confidential advisers. This resolution was founded on the determination of the

[1] There are four kinds of higher schools with the nine years' course in Germany, the Gymnasium, in which the main attention is given to classical languages, the Realgymnasium in which classical and modern tendencies are balanced, and the Oberrealschule and Realschule in which the modern or scientific side vastly predominates.

supporters of the classical schools not to oppose the admission of pupils from the modern schools (Oberrealschulen), or from schools of the mixed system (Realgymnasien), in the hope that the superiority of the classical schools would be the more clearly proved by the free competition, and especially also that they would be released from the incubus of such pupils as in quality, or degree of ability, were out of place there. Now, it had never been intended that the modern and mixed schools should regard themselves thenceforward chiefly as preliminary stages to the university. It was expected that only those few pupils from them who felt a special call to higher scientific studies would take advantage of the new privilege, while the majority would devote themselves as before to more everyday ends. It is, however, undeniable, that a much greater percentage of the students in these more practical institutions is streaming into the university than is desirable; and what is worse, they enter, not for the sake of working in those subjects for which they had been chiefly trained (which were already free to them in the university), but in almost all other subjects as well, with the exception perhaps of theology. The allurement of the new liberty has clearly taken effect here, but just as clearly also the idea of the social distinction which accompanies the academic calling. For in Germany, particular industrial districts excepted, university men are still regarded socially as an upper class, to which, in the eyes of the public, only the nobility, the official class, and perhaps the most distinguished artists are superior.

Convincing statistics of the results of the university work of students from modern schools in comparison with that of students from classical schools are at present not attainable. Great importance is not laid on figures and average results; the examinations, which must after all be the chief means of information, are affected by many different factors which can not be weighed and measured, the addiction of the examiners to the method in which they themselves were schooled being possibly one of them. On the whole, however, judging from a number of personal opinions, the results certainly do not seem to denote a triumph for the modern schools. From the classical schools also, it is true, the number of those is not small whose mental capacity does not mark them for scientific study; and on the other side there are always to be found among the students from the modern schools individuals of conspicuous talent and the highest aspirations who do creditable work in each subject. The students coming from the modern schools can indeed always be praised for their steady industry, to which several causes tend. But still the predominating impression is that the foundation gained does not fit them well for the study of science, and that in the great demand for training in exact sciences, a sense does not develop itself for other departments. Though the fact that Latin is necessary for

anyone who wants to be at home in the world of scientific terminology is perhaps of minor importance, many modern schools (Oberrealschulen) have already introduced Latin into their curricula, to the great burdening of the pupils. The Realgymnasien, though the most of their time is devoted to the exact sciences and modern languages, have Latin in common with the classical schools and turn out pupils some of whom are similar in mental caliber to those from the classical, and some to those from the modern schools. Naturally it will always be the case that in the schools in which the exact sciences predominate, pupils who wish to devote themselves to higher study will go to the schools of technology (technische Hochschulen), which—a further important feature of our civilization—are in the midst of a progressive development.

It may here be mentioned that two new institutions of this sort have been recently added in Prussia to the three already existent, viz, in Breslau and Danzig; there is the same number, namely, five, scattered over the rest of Germany. The Kaiser, who, as is well known, takes a lively interest in modern technical education, has elevated the schools of technology in his own Kingdom to the level of the universities, by conferring on the rectors the same honors and privileges. The student life in these institutions, as is not surprising, has formed itself after that in the older universities, though the students in the former are tied much more to definite courses of studies and each session to fixed tasks. They have to work thoroughly hard; the exact sciences, and especially technical subjects, admit of no disconnectedness of knowledge, scarcely even of subjectivity of choice.

A further change during the last few years is the right conferred on women to study at universities in full equality with men, whereas formerly they could only attend as hearers. Their number is growing from year to year. Up to the present time it has been almost impossible to compare their working capacity with that of the men students. Almost all have come to the university at a maturer age and with a different preparatory education, and usually only those of really good talent and ardent ambition have made the attempt. Things will, however, be different in a few years, especially, for example, as women teachers in the higher schools in the future will have the chance of good posts only when they have gone through exactly the same studies and examinations as the male teachers. On this account, many find themselves driven to study whose mental gifts are by no means eminent and whose physical powers are doubtful. It is already strikingly clear that women holding fixed appointments require leave of absence on account of weak health much oftener than men.

The increase in the number of foreigners at the German universities steadily continues, but has recently had to be checked. Too many individuals of doubtful education, and frequently also leading very questionable lives, forced themselves in, particularly from the eastern European countries, and took up the space and the best seats at the practical exercises, crowding aside the German students. Visitors from America or England will hardly be likely to find the recent measures of restriction an obstacle; their previous education is often excellent. It is of course the natural and desirable thing that only those students of a nation should be sent abroad who have distinguished themselves above the average. The dark sides of the German university system above mentioned apply but little to such; the lectures of the most distinguished professors are precisely what they have come for, and the arrangement of their studies can be confidently left to themselves. There are, by the way, many things going on to make the stay in Germany more fruitful for foreigners. There is a prospect that the so-called Böttinger House, a home for English and American students in Germany, will soon be removed from Göttingen to Berlin, and its facilities greatly extended. It stands to reason that Berlin, with its many means of education, can offer all sorts of valuable opportunities to strangers; but from certain other points of view other universities might be better, especially at first. Medical students, for instance, find it difficult to carry out their aims at Berlin, on account of the crowds which throng the laboratories. Würzburg, Freiburg, and probably Giessen also would be more suitable. For theology, in the same way, Halle, along with Berlin, is suitable; for philosophy as well as for jurisprudence, Heidelberg; for ancient languages, Göttingen; for modern, Göttingen, Bonn, and Marburg; for pedagogy, Jena and Leipzig; for experimental psychology, Breslau and Leipzig; for art, Munich; for agriculture, once more Halle. These hints, however, must be taken as incomplete, and conditions easily change.

As is only natural, the various branches of learning differentiate themselves more and more from one another, and thus, through the splitting up of departments already existing and through the extension of study over quite new fields, new chairs become needed. As recent examples may be mentioned the creation or revival at the University of Berlin of professorships in the history of religions, colonial science, and Persian, while a variety of foreign languages have long been practically taught at the oriental seminary here. On the other hand, various well-justified demands still remain unfulfilled. Thus, while classical languages are everywhere represented by several professors (especially when one counts archæology, epigraphy, the history of ancient constitutions and culture along with them), only the most necessary chairs have heretofore been

created for modern languages, usually only one for the entire romance philology (even at Berlin it is no better) and one for English, in spite of its wide range and importance. Some casual assistance is given chiefly by privatdocents. Undoubtedly this state of things can not last. Further, there are lacking (in sharp contrast particularly to North America) the much-needed chairs of pedagogy, to which people in many quarters still refuse the title of a science, though their objections have often enough been confuted. It is usually regarded only as a sort of minor division in the department of psychology, although several other sciences, like ethics, political science, and the history of civilization, trench on that subject just as much. Only very gradually is progress being made here. A pedagogical seminary on a grand scale is expected to be organized soon at Halle University, and at Berlin, too, a seminary is no longer to be completely wanting. Such institutions have long existed at Jena and Leipzig, outside of Prussia. In the latter place especially it is made possible, even comparatively easy, for the teachers of the elementary schools to finish their university studies with the Ph. D., and much advantage is taken of this. Among this class of teachers there is a strong movement to have the teacher's professional training removed from the present organizations, teachers' seminaries, to the university, but against this many objections have been urged with success. [1]

Of greater interest for foreign readers are perhaps the movements which are going on in the German student world. To put it briefly, the students' clubs (Corps, Landsmannschaften, etc.) of the older form are losing ground to those which are founded on newer principles. The essential basis of the older corporations was and is the firm formation of a powerful community for the cultivation of boldness and courage, steadfast friendship, social and light-hearted enjoyment of youth; in practice, however, this is combined with considerable love of fighting and drinking, preservation of outworn ceremonies, and thoughtless pursuit of pleasure. Many of these bodies have at present but few members. At the same time the spirit which inspired them is by no means dead and in certain universities, chiefly smaller ones, their characteristic way of life remains to this day. More prosperous, however, are the scientific societies, the athletic organizations, and those based on national, ethical, or Christian principles. And it is in keeping with the spirit of the time as well as with academic tradition that the societies of similar aims at the various universities bind themselves together into united bodies. Even for the students who are not in favor of special clubs

[1] In university circles there is a movement also to raise the whole academic position of the "additional" (ausserordentlich) professors, who have gradually become very numerous and wish to be more fully incorporated into the organism of the faculties, instead of figuring, as has been the case heretofore, only on the outside, without possessing any rights worth mentioning.

a kind of organization (the Freie Studentenschaft) has been formed, in which smaller groups are always being arranged for mutual studies, various kinds of sport, good fellowship, the cultivation of political and social interests, and other educative purposes. The erection of student homes—badly needed it must be acknowledged—has here and there been begun; for example, in Charlottenburg.[1]

The relationship of the university to the school has been repeatedly and publicly discussed during the last years, and prominent representatives of both, and especially of the former, have taken part. "What should be the ideal of the higher schools in order to fit their pupils best for the advanced studies?" the university professors ask, and answer according to their own bias. On the other side it is asked, "What ought the university to do in order to produce really well-trained teachers for the higher schools?" and criticism of the present means is not wanting. Space is lacking here for discussion of details.[2] The universities have up to the present time enjoyed the confidence of the nation much more generally than have the schools, although this is not wholly justified.

The number of pupils attending the higher schools, and the number of these schools themselves, has increased within recent years. For Prussia the total number of male pupils in these institutions, apart from the primary schools and preparatory classes frequently linked to them, rose from 162,057 in 1901 to 226,693 in 1910. With the girls it is similar. As for the boys' higher schools themselves, the number of complete schools, those with a nine-year course, increased during the same time from 408 to 586. It is here noteworthy that in 1901 the majority of these still represented the classical type; in 1910, this type had only 47 per cent. The Realgymnasien and Oberrealschulen have thus experienced a big increase, not difficult to explain from the cultural tendency of the age. This change will apparently go considerably farther.[3] The allowances which the Prussian State grants to the above-mentioned schools increased in the same period (1901–1910) from a little more than

[1] Mention may be made of the "Academic Olympia" held this summer in Dresden, at which student clubs from all sorts of universities competed in rowing, fencing, swimming, athletics, etc.

[2] State grants, especially for the further scientific training of teachers, have been steadily increased. On traveling scholarships abroad (for archæologists, students of modern languages, etc.), on holiday courses, and such arrangements more than 100,000 marks are spent yearly. To this belongs also the further development of the international exchange of young teachers.

[3] The number of so-called reform schools (which begin Latin not until the fourth year) has gradually risen to 130 in Prussia; the arrangement is steadily growing more frequent, not in connection with the properly classical schools, but chiefly in connection with the mixed system, the "Realgymnasien." The junction of several kinds of schools into one system under the same principal (e. g., the Gymnasium with the Realschule, etc.) is much commoner than formerly. The variety of school species officially recognized is altogether on the increase. The lower schools, or elementary classes, joined to the higher schools (which are, however, only found in a number of them) have also increased within the last 10 years corresponding to the increase of the schools in general. At the same time there exists in many parts of the country a strong movement against the continuation of such special schools for the higher social class and for the sending of all children to the common elementary school. It is of course only to be expected that as soon as these lower schools are dissolved private schools will be opened and much used.

12,000,000 marks to nearly 18,000,000. In addition to this must be reckoned the very extensive grants of the towns for their higher schools.

The position of the German higher schools as regards the public, notwithstanding their rapid development, is somewhat unpleasant. After many years had been zealously occupied in the inner perfecting of the schools, and much progress had been made with the organization of school life, the technic of teaching, the cooperation of the teachers, the discipline (and this in the humane direction), hygiene, fairness in judging the young, and the improvement of means of recreation, an opinion began to gain ground that there was almost nothing good in these higher establishments. The claims upon the pupils had, people said, become stricter and stricter (as a matter of fact the opposite is the case); their time and strength were taken up in cramming, memorizing, and repeating thousands of unnecessary and useless things; individuality had no show among the many, and no rights; and a deep state of depression was produced among the young, the horror-exciting evidence of which was the not infrequent suicides of school children. This last disturbing feature, however, is proved by statistics to be not commoner among the pupils of the higher schools than among other classes of humanity of the same age nowadays; and much more general causes belonging to the times, modern life, and home education, work together to produce it.

The public, or at least the enthusiastic and unreflecting public, now demand that the young should be allowed to develop themselves, to live their lives out as much as possible unhindered; that one should regard each individual aptitude as legitimate and valuable; that one should not rob the young of their happiest days, either by hard home lessons, examinations, or anything else; that all learning should be turned as far as possible into play, and the actual play made at least an equally important part of the education. But all this and much more of the same sort has been heard in the past, and similar ideas are not wanting at present in France and elsewhere. It is in Germany, however, that these assertions are most passionately and confidently made, clearly as a reaction from the tightly interwoven organization of the school system, but they are none the less exaggerated, distorted, and unjustifiable on that account. Then again a special movement is on foot for the allotment to art of an essential place in the education course. It is hoped thus to create an invigorating and elevating influence, which is scarcely any longer expected from the religious and ethical side. The attainment of greater depth in this latter respect is the evangel of Dr. Friedrich Wilhelm Förster, at present in Zurich, an educator who has become widely known during the last few years. The writings published by him with this object, for example, "Jugendlehre," have certainly

enjoyed an extraordinary circulation and, it is to be hoped, will prove effective. The question of religion and the higher school is, unfortunately, immensely more difficult than in England and America.[1]

Germany, by the way, is not at all above adopting some of America's valuable reforms in pedagogy. At the same time it will not be found easy to go quite so far with the organization of self-government by the pupils as has been partly accomplished there; but the experiment with similar arrangements has nevertheless already been made at a number of schools (for example, in Frankfort on the Main, and on the lower Rhine), and a continuance of the movement is hoped for. The freedom of choice in subjects allowed to the American pupil is as little liked in Germany as in France, at least in the earlier classes; but that a certain amount of choice ought to be gradually allowed to the scholars of the upper classes, those between 16 and 18 years, has been already well recognized, and experiments to carry it into practice have been made. As is well known, caution in undertaking new steps is a fundamental principle of German school administration, and existing institutions are so tightly interlocked with one another that reforms are more difficult to introduce than elsewhere. It must at the same time be added that the range of view of the teachers in the higher schools is filled much more with details of method, the particular lessons, and the firm organization of school life than with the more general or deeper questions of the education of humanity. It is indeed in urging their greater attention to this side of the question that the present writer, in his quality as teacher at the University of Berlin and writer on pedagogy, sees his mission.

Coeducation has had no success in Germany at all corresponding to recent wishes. The doubts of its value, which have by some been recently expressed in America, have had the upper hand here from the very beginning. It is indeed no longer impossible for girls to attend boys' higher schools, but this is allowed only under special and exceptional circumstances. On the other hand, a new arrangement of the entire system of education for girls was made a few years ago, chiefly in Prussia, which opens up all sorts of fair possibilities to them, shapes their course in many ways after more modern and kindly principles than exist in the boys' schools, and gives, particularly to those women who have no ambition either for higher academic studies or to become teachers, a solid training, by initiating them into those high domains in which women's life and rule find highly significant exercise, such as social service, the cultivation of the beautiful, and a many-sided understanding of the human soul.

[1] There has recently been arranged in Weimar, the home, as is well known, of our greatest poets, the representation of a number of classical dramas, expressly for the youth of the nation, and out of all parts of Germany, even from the German schools abroad, a willing and grateful audience streamed to the hallowed spot. This year, when the plays lasted from the middle of July till the middle of August, before new hearers each week, 3,314 scholars with their teachers applied for admission.

The new organization of higher education for women in Prussia has now been carried out in such a way that, out of 426 girls' higher schools, 92 have training seminaries for teachers connected with them, and 63 (partially the same) the department called "Women's school." In Leipzig a plan has recently been formed to create a special "High school for women" as a pedagogical and social training establishment of the highest class.

Many other new forms of organization have been carried out in the sphere of the higher schools. The "reform schools," in which Latin is begun at 12 years instead of at 9, while French or English takes its place at the earlier age, are increasing every year. In Prussia they number 130. As they have still, however, to attain the same end as the gymnasien and realgymnasien of the older style, they are not without their troubles. They are regarded with favor by the public, since people want to save the young all avoidable overstrain, and find Latin too hard for the earlier years. To meet the need of relief also the lessons are being shortened more and more, the intervals between them lengthened, and the afternoon classes everywhere are gradually being abolished; at any rate, those in scientific subjects. More attention is paid in many ways to hygienic considerations—for example, in the provision of new school seats. The interest in games and athletics has very much increased; rowing clubs, for instance, exist almost universally where a river or lake makes the exercise possible. There is, nevertheless, no inclination to abandon the systematic German gymnastics for the freer athletic exercises, however uncongenial the former may be to certain other nations.[1]

The introduction of manual training into the curricula of the higher schools has continued, and the work is now established in about 40 higher schools for boys in Prussia, with as many more desiring it. Modeling for the youngest classes has been introduced, at least in some schools; drawing has been taught with quite other aims and objects during the past decade than formerly; and in natural science, laboratory work is increasing. No single subject of the school course but has its problems, has aroused conflict of opinion, and is the object of earnest experimenting. Perhaps most difficult of all are the demands for provisions for religious instruction which will in the noblest way cultivate the feelings without injustice to the scientific knowledge of to-day. Further demands are made for the inclusion and development of a preparatory course in philosophy fitted to the school hours and work; for granting to biology a central position and more space in the curriculum (demanded by the naturalists); and, lastly (as is vigorously demanded from other quarters as a main subject), for the

[1] Of school clubs for the purpose of physical exercise (rowing and swimming, rambling, athletics), 776 are now to be found in the higher schools of Prussia, besides 559 for definite scientific, æsthetic, and technical purposes. These clubs, which are divided among 550 schools, possess a membership of about 32,000, drawn, of course, only from the upper classes. Only a quarter of the schools are without clubs.

institution of a thorough grounding in citizenship in order to as far as possible develop a genuine civic sense.

Rather original is the claim for special schools, or at least special classes, for particularly gifted pupils, just as auxiliary schools and classes have for some time past existed for those of insufficient powers. This claim—at first made in one quarter, but since more widespread—is founded on the fact that the more talented pupils, so long as they remain among the average members of the class, can not reach their highest possible development and sometimes even degenerate. It is to the interest of the nation to train to their part in life those natures which are meant for intellectual leaders, if only on account of the ever-increasing international competition. The demand has, however, won no ground as yet in actual practice; the opposing pedagogical scruples are not slight. On the other hand, the movement for new educational institutions is on the increase and the "country school homes" (Landerziehungsheime), which approach their English model at Abbotsholme, or similar institutions, are gladly taken advantage of. The number of city parents who recognize how unfavorable the city environment or the home atmosphere is for the education of their children, or who are themselves actually incapable, has become very large. Even the Prussian Government is making experiments in this direction. The Arndt Gymnasium at Dahlem, in the neighborhood of Berlin, and the century-old Joachimsthalische Gymnasium, now in Wilmersdorf-Berlin but shortly to be removed into the country, are examples.

In addition to the not very numerous old foundations (Stiftungen), fairly many "Alumnate" have been created in connection with higher schools—i. e., homes officially countenanced and patronized, under the conduct of a trustworthy uppermaster and cultured housekeeper, in which children from a distance are offered a kind of family life as well as furtherance of their studies. These "Alumnate" are distributed over all the Prussian Provinces and already number between 50 and 60.

"Forest schools" for weakly children of the people's schools having existed in different parts of Germany for some time past, the town of Charlottenburg has now erected the first school of this kind for children of the higher schools. Here, in the first year, about 100 children, boys and girls, were taught together according to the curriculum of the three lower classes.

Germans can not, at any rate, be accused of stagnation, though the mobility of German education perhaps seems comparatively slight to those who are accustomed to much freer studies and a looser framework in their own country. But surely it is one of the best recognized principles in the educational world of to-day to keep the eyes wide open to the movements which go on in other lands and so prevent self-complacency and torpor at home.

ADDENDA.

TABLE 1.—*Distribution of students among the German universities for the years specified.*[1]

Universities.	1901 [2]	1905–6 [3]	1907–8 [3]	1910–11 [3]
Berlin	5,431	8,081	8,220	9,686
Bonn	2,240	2,908	3,209	3,846
Breslau	1,770	1,860	2,071	2,454
Erlangen	977	1,024	1,058	1,011
Freiburg	1,766	1,641	1,814	2,246
Giessen	916	1,043	1,144	1,243
Göttingen	1,409	1,719	1,857	2,233
Greifswald	820	692	803	948
Halle	1,713	2,025	2,237	2,661
Heidelberg	1,464	1,443	1,676	2,008
Jena	772	1,057	1,375	1,637
Kiel	1,040	749	1,025	1,439
Konigsberg	923	1,004	1,105	1,387
Leipzig	3,517	4,224	4,341	4,900
Marburg	1,231	1,370	1,670	1,981
Munich	4,494	5,147	5,943	6,905
Münster	791	1,445	1,606	2,047
Rostock	549	609	648	816
Strassburg	1,118	1,459	1,709	2,067
Tübingen	1,489	1,536	1,578	1,883
Würzburg	1,108	1,354	1,382	1,425
Total	35,538	42,390	46,471	54,823

[1] Compiled in the Bureau of Education from Deutscher Universitäts Kalender for years named.
[2] Summer semester.
[3] Winter semester.

TABLE 2.—*Distribution of students among the different faculties of the German universities for the years specified.*[1]

Faculties.	1900 [2]	1905–6 [2]	1907–8 [2]	1910–11 [3]
Protestant theology	4,116	2,186	2,228	2,531
Catholic theology		1,680	1,709	1,760
Law and administration	10,232	12,611	12,385	11,569
Medicine, dentistry, and pharmacy	8,165	7,285	8,807	12,840
Philosophical faculty [4]	11,473	18,628	21,342	26,123
Total	33,986	42,390	46,471	54,823

[1] Compiled in the Bureau of Education from Deutscher Universitäts Kalender for years named.
[2] Summer semester.
[3] Winter semester.
[4] The philosophical faculty comprises philosophy, classical and modern philology, history, mathematics, and natural sciences.

CHAPTER XXI.

EVENTS OF INTERNATIONAL INTEREST.

International foundations.—Celebrations at foreign universities.—International congresses.—International exhibition of school hygiene.

AMERIKA INSTITUT.

The Amerika Institut, which occupies rooms in the Royal Library building at Berlin, was formally organized in October, 1910, with Dr. Hugo Münsterberg, of Harvard University, as its first director, acting in an honorary capacity during the year of his exchange professorship at the University of Berlin. The institut is a foundation of the German Government, and its financial support comes chiefly from the banking house of Koppel, in Berlin, and from Mr. James Speyer, of New York. The office is indebted to Dr. Münsterberg for the following information concerning the purpose and scope of this organization:

The general aim of the institut is the systematic furthering of the cultural relations between Germany and the United States. Strictly political and commercial affairs lie outside of its realm, but everything which refers to education and scholarship, to literature and art, to technique and social welfare, to travel and public interests, to peace and international understanding, will be the fit object of its efforts. While the political relations of the countries have always been organized, the cultural connections have been the results of chance influences which have brought about a wasteful scattering of energies, and often a disappointing and even harmful outcome. The institut is the first effort to organize and forward these mutual interests of two great nations. It is hoped that the enterprise may lead to the founding of similar governmental institutions for cultural relations to foreign countries among all the leading nations of the world.

In confining the work to Germany and America, the institut will aid Americans who seek contact with German institutions and scholars, libraries and archives, laboratories and museums, hospitals and academies, industrial establishments and municipal works, and in a corresponding way Germans who need connections with American

institutions or personalities. It will endeavor to further international congresses and researches, exhibitions and expeditions, statistical inquiries and historical investigations, and to increase the circulation of American books in Germany and of German books in America. The whole exchange between the Smithsonian Institution in Washington and its correspondents in Germany, the transmission of official documents and the arrangements for copyrights will be undertaken by the institut, which will also have its own extensive American library. The officers of the institut will systematically encourage the translation of American books into German and of German books into English. An important part of its functions will be furnishing information to institutions; for instance, in the interest of the American students it will advise the German universities concerning the relative value of the degrees of the 600 American colleges. In short, the services of the institut will include everything which removes possible misunderstandings and promotes the cultural friendship, which indirectly may also work toward harmonious political and commercial relations.

The staff comprises at present, besides the director, scientific workers, librarians, translators, and American and German secretaries.

CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE.

A noteworthy nonacademic movement for general education is a part of the work of the Carnegie Endowment for International Peace. Its division of intercourse and education, coordinate with the divisions of international law, and of economics and history, has set for itself a task authoritatively described by President Nicholas Murray Butler, of Columbia University, a member of the board of trustees, as follows:

> It will be the function of this division to supplement the work of the two divisions, which may be called, perhaps, the scientific ones, by carrying forward vigorously, and in cooperation with existing agencies, the educational work of propaganda, of international hospitality, and of promoting international friendship. It will be the purpose of this division to diffuse information and to educate public opinion regarding the causes, nature, and effects of war, and the means for its prevention and avoidance; to establish a better understanding of international rights and duties and a more perfect sense of international justice among the inhabitants of civilized nations; cultivate friendly feelings between the inhabitants of different countries, and increase the knowledge and understanding of each other of the several nations; to promote a general acceptance of peaceable methods in the settlement of international disputes; and to maintain, promote, and assist such establishments, organizations, associations, and agencies as shall be deemed necessary or useful in the accomplishment of the purposes for which the endowment exists. In other words, this division will make practical application of the teachings and findings of the divisions of international law and of economics and history.

CELEBRATION OF THE ONE-HUNDREDTH ANNIVERSARY OF THE FOUNDATION OF THE UNIVERSITY OF BERLIN.

By Rudolf Tombo, Jr.,
Assistant Professor of the Germanic Languages and Literatures in Columbia University.

It is exactly 25 years ago that the University of Heidelberg celebrated the five-hundredth anniversary of its foundation, and a similar event was celebrated by the University of Leipzig only two years ago. Compared with these venerable institutions the University of Berlin seems a mere infant, and yet in the century of its existence it has forged to the front with giant strides, and to-day occupies the foremost position among the score of famous German seats of higher learning. Only two German universities, viz, Bonn, established in 1818, and Munich, founded in 1826, are younger than Berlin, and yet the Royal Frederick William University, as it is named in honor of its founder, King Frederick William III of Prussia, has, in a comparatively brief period of time, outstripped all of its rivals, not only in point of size of faculty and student body and in the number and diversity of its institutes, but also in the depth and range of its influence. Established in an era of political storm and stress, when the heterogeneous and disjointed mass of German states and principalities lay in humble subjection at Napoleon's feet, it furnished eloquent testimony of the inability of the ruthless conqueror to crush that love of learning and the desire to discover ultimate principles and great truths which had been marked characteristics of German scholarship for centuries. In spite of opposition on the part of the near-by University of Frankfort (on the Oder) and of certain quarters of the Berlin Academy of Science, a series of lectures was inaugurated in the winter of 1809, which was followed by the formal opening of the institution in 1810 with an enrollment of 256 students and a teaching staff of 58. To-day the university has over 10,000 students and more than twice as many instructors as there were then students. From its very inception the university attracted some of the foremost scholars of the land, who aided mightily in winning prestige for the new institution; the number of these has increased constantly, but since the rehabilitation of the German Empire and the establishment of Berlin as its political and social center, the marvelous growth of the city and the unqualified advantages it offers to men of letters and of science and to those in search of knowledge have combined to produce a progress that has proceeded by leaps and bounds. The University of Berlin to-day is stamping its impress not only upon the municipality, toward the solution of whose problems it is furnishing constant aid, nor merely upon the country at large; its radius of influence reaches out much farther in all directions, for there is no

civilized corner of the globe which has not been, or is not, represented among its student body. Berlin, in fact, attracts more foreigners than any other German university, and the tide of American student immigration, which turned from Göttingen to Leipzig some years ago, is now flowing into the Kaiser's capital. There is another reason why American educators should take a special interest in Berlin, and this is found in the fact that the university welcomes two American men of learning to its halls annually, the Harvard exchange and the Theodore Roosevelt professors, not the least important of whose missions is to promote a spirit of intellectual good will and mutual understanding between two great sister nations.

Especial interest therefore attaches to the celebration of the one-hundredth anniversary of the foundation of the University of Berlin, which took place October 10–12, 1910, in the presence of a most distinguished company of scholars from all parts of the world, representing over a hundred German and foreign institutions of higher learning and almost a score of academies, including the American Philosophical Society and the Smithsonian Institution; from England they came and from Russia, from Greece and from Turkey, from China and from Japan, from the United States and from Canada, from Australia and from South Africa, and from a score of other lands. The reception to the foreign delegates and guests of honor took place in the rooms of the university at 8 o'clock on the evening of October 10, after an impressive festival service had been held in the Cathedral, at which the sermon was preached by Prof. Kaftan, the dean of the faculty of theology. A torchlight procession arranged by the student body took place the same evening, probably the most imposing ever witnessed in the German capital. Over 3,000 students and numerous alumni marched through the Tiergarten and down Unter den Linden, then assembled in front of the brilliantly illuminated main building of the university, where a committee presented the congratulations of the student body to the rector, the students having joined previously in the academic song of songs—Gaudeamus Igitur.

The climax of the festivities was reached in the first Festakt, on the morning of October 11. This, like the second formal ceremony on the following day, was held in the new Aula, which the minister of public instruction dedicated as the jubilee gift of the Prussian Government. The new assembly hall of the university is located in the old Royal Library, the entire building having been remodeled in the interior, and it furnished an unwontedly festive appearance in its new garb. The hall was filled with a representative assemblage when the rector of the university, Prof. Erich Schmidt, entered with the deans of the four faculties. These academic dignitaries were followed

by the Emperor and Empress, Princess Victoria Louise, and Prince Ruprecht of Bavaria, who were assigned to seats in the front of the hall, while the representatives of the student societies saluted and lowered their flags.

At the conclusion of the opening remarks by the rector the Emperor ascended the rostrum and read his congratulatory address in loud and clear tones. Of special interest was the announcement of the gift of a fund of about 10,000,000 marks, which had been collected by His Majesty for the purpose of founding and maintaining a series of research institutes in the city of Berlin, the preliminary plans for which had been outlined by Prof. Adolf Harnack and Geheimrat Friedrich Schmidt, of the ministry of public instruction. The project itself is an old one, going back to the days of Director Friedrich Althoff, but the first definite steps were taken at the instigation of the Emperor himself. The institutes are to be managed by a society for the promotion of science in Berlin; this society has since been organized, and arrangements have been made for the establishment of a chemical institute, to which Prof. Ernst Bechmann, of the University of Leipzig, and Prof. Fritz Haber, of the Technological School of Karlsruhe, have been called.

The Emperor was followed by the minister of public instruction, Von Trott zu Solz, and later by the chief burgomaster, Martin Kirschner, who referred to the fact that honorary citizenship had been conferred by the city of Berlin upon five members of the faculty of the university, viz, Alexander von Humboldt, August Boeckh, Leopold von Ranke, Robert Koch, and Rudolf Virchow, and in the name of the city presented to the university a fund of 200,000 marks for the establishment of a series of traveling stipends of at least 1,500 marks in value.

The opening speeches were followed by the presentation of congratulatory addresses by the representatives of institutions of higher learning and learned societies from all sections of the world, the representatives of each nation or group of nations having previously selected a spokesman, who addressed the rector, while the other delegates filed by and deposited their scrolls or parchments, which in many instances were beautifully illuminated. Marked applause was given to Prof. Poincaré, of the University of Paris, who was one of the two spokesmen of the Romance group, the other being Prof. Brugi, of the University of Padua. England, with her colonies, was represented by Lord Strathcona, and President Arthur T. Hadley, of Yale, represented the American universities. In his response the rector referred to the close intellectual ties uniting Germany and the United States and read a passage from President Wheeler's letter of regret: "You are still my rector and I feel my loyalty reaching out instinc-

tively to your support; and I feel Berlin still my university, for I can never lose out of my life the memory of the kindness of last winter's welcome." At the conclusion of the exercises the audience rose and all, including His Majesty, joined heartily in a stirring Gaudeamus Igitur.

In addition to the endowments mentioned above announcement was made by the prorector of the following gifts: A minimum of 100,000 marks to the student body of the university; 150,000 marks for the establishment of a chair of colonial geography; by the Philosophical Society of Berlin, the proceeds of a collection for a Fichte monument; by the Legal Society, funds for the erection of a Savigny monument; and by the holders of the Berlin doctorate, 18,000 marks toward a student-aid fund. Various gifts were also received from the merchants of Berlin and a number of Leipzig publishing houses. The ceremony in the Aula was followed by a dinner in the large "White Hall" of the Landesausstellungs Park.

In the evening a festival performance of Mozart's "Die Hochzeit des Figaro," with Richard Strauss conducting, was given in the Royal Schauspielhaus, as the Royal Opera House was undergoing extensive alterations at the time.

The second Festakt took place in the new Aula on the morning of October 12. The exercises began with the delivery of an historical sketch of the university by its historian, Max Lenz, forming a synopsis, as it were, of his monumental four-volume history of the institution, which had just appeared. Of greater interest to the foreign delegates, however, was the awarding of the honorary degrees, the first person to be honored with the degree of doctor of laws being His Majesty the Emperor. Among the Americans receiving honorary degrees were Justice Oliver Wendell Holmes, of the United States Supreme Court; Prof. John William Burgess, of Columbia University, who received the degree of doctor of laws; Prof. Theodore William Richards, of Harvard University, doctor of medicine honoris causa; President Arthur T. Hadley, of Yale University, and President Abbott Lawrence Lowell, of Harvard University, doctor of philosophy honoris causa.

The afternoon of October 12 was given over to a student garden festival in the Landesausstellungs Park, which was filled to the gates with a happy and noisy throng. The festival proper partook of the nature of a country fair, living pictures illustrating student life between 1600 and 1810, etc., the keynote of the affair, so far as the student actors were concerned, being a reproduction of the academic costumes and customs of the year 1810. The *Kommers*, which closed the official celebration, took place in the evening in the large exhibition halls at the Zoological Gardens, no less than 8,000 students

and alumni participating and joining in the singing of student songs accompanied by a splendid military band.

On the following evening a number of foreign visitors, together with several prominent members of the faculty as well as several student representatives, were invited by the Emperor to a gala dinner in the palace.

In view of the commanding influence of Germany in the world of science and intellect the visiting delegates were deeply impressed by the note of universality that was struck again and again in the course of these elaborate and imposing ceremonies.

ANNIVERSARY CELEBRATIONS AT OTHER UNIVERSITIES.

St. Andrews.—The five hundredth anniversary of the foundation of the University of St. Andrews, Scotland, was celebrated with impressive ceremonies September 12 to 15, 1911. Among the representatives of higher learning in the United States present as delegates on that occasion were: Dr. Leonhard Stejneger, Smithsonian Institution, Washington, D. C.; Dr. Jacob Gould Schurman, president of Cornell University, Ithaca, N. Y.; Dr. Nicholas Murray Butler, president of Columbia University; Dr. Josiah Royce, professor in Harvard University, Cambridge, Mass.; Prof. H. A. Sill, Cornell University; Dr. W. W. Keen, Jefferson Medical College, Philadelphia; Prof. Elmer T. Merrill, University of Chicago; and Dr. Charles S. Minot, Harvard University.[1]

Christiania.—The one hundredth anniversary of the foundation of the Royal Frederick University, Christiania, Norway, was celebrated September 5–6, 1911. President Schurman, of Cornell University, and Dr. Leonhard Stejneger, of the Smithsonian Institution, were present in an official capacity on that occasion. Other delegates from the United States were: Prof. E. L. Nichols, Cornell University; Prof. F. W. Woll, University of Wisconsin; Prof. Gisle Bothne, University of Minnesota; Prof. John Tinglestad, University of North Dakota; and Prof. W. H. Carpenter, Columbia University.

Breslau.—Prof. J. R. S. Sterrett was the delegate from Cornell University on the occasion of the one hundredth anniversary of the foundation of the University of Breslau, Prussia, August 1–3, 1911.

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[1] See also page 563.

FIFTH INTERNATIONAL CONGRESS FOR THE AMELIORATION OF THE LOT OF THE BLIND.

HELD AT CAIRO, EGYPT, FEBRUARY 20 TO 25, 1911.

REPORT BY MISS ETTA JOSSELYN GIFFIN, ACCREDITED AS A NATIONAL DELEGATE TO THE CONGRESS.[1]

In pursuance of instructions I proceeded to Cairo as a national delegate, also representing the Library of Congress, presented my credentials, and was cordially welcomed and given numerous opportunities to improve the great advantages offered to the "congressionists" for the study of the work in behalf of the blind.

Representatives from 10 nations of the Old and the New World were in attendance, many of whom were celebrated oculists and well-known specialists in the care and treatment of the blind. The debates were thoroughly practical and were accompanied by many useful illustrations.

February 20 the congress was formally opened at 10.30 a. m., in the Khedivial Opera House, under the patronage of His Highness the Khedive, Abbas II, in the presence of the cabinet ministers, the diplomatic agents of the powers, and a great number of high officials and notables.

Prince Ahmed Pasha Fouad, uncle of the Khedive, who was delegated by him to preside at the ceremony, was accompanied by the prime minister and members of the cabinet. He delivered an eloquent speech of welcome to the official delegates and members, and in the name of His Highness Abbas II, Khedive of Egypt, declared the congress open.

His Excellency Hussein Pasha Roushdi, minister of foreign affairs, made an interesting address in which he expressed Egypt's gratitude to the countries that sent delegates to the congress, and greeted the men and women who responded to the invitation of the Government. He said that although Egypt is still far from equal to certain European countries in the development of institutions for improving the conditions of the blind, it has the will to achieve this end, and the solicitude shown by the Government in organizing the congress and founding hospitals for combating eye diseases is sufficient proof that it will succeed and will attain a worthy position among philanthropic nations.

The procureur general Abdel Khalek Pasha Sarwat made a speech in Arabic in which, after paying a warm tribute to the Khedive, he lauded the merits of the philanthropic congress.

[1] A report of the congress is given also by Mr. Walter G. Holmes on page 604.

He was followed by Abbe Rohat, one of the delegates from France, and by Miss Etta Josselyn Giffin, one of the delegates from the United States of America, who in brief speeches conveyed the greetings of their respective Governments, and the educators, specialists, and the blind in their countries to the Khedive, his Government and the "congressionists."

The object of the congress and its official program were set forth by Dr. Eloui Pasha, one of the chief promoters of the congress.

The subsequent meetings of the congress were held at the Egyptian University. His Excellency Abbate Pasha, now in his ninety-first year, presided at the first session, and recalled the Ophthalmic Congress which met in 1862 when he was delegate of the Egyptian Government, at which time the first landmarks were placed toward the amelioration of the lot of the blind. He spoke of the unhappy efforts of the first school for the blind, founded 30 years ago by Orissi Bey. The school unfortunately succumbed through lack of resources. The contrast is great between the first effort and the excellent school now prospering at Zeitoun, which was founded in 1901 through the generosity of the late Mrs. T. R. Armitage, of London.

The proceedings were arranged under several heads or subjects, viz:

First question.—What definition shall be given to cecity, and what is the degree of sight below which an individual may be considered blind?

In the discussion of this question the congress listened successively to Rev. Amadeus Stockmans, president general of the Brothers of Charity, Belgium; Dr. Louis Dor, Lyons, France; Dr. Mohamed Tahir Bey, Cairo; and Luigi Salina. So many members treated this subject exhaustively that the discussion engrossed the entire session.

Second question.—What are the best measures to adopt to avoid the spread of the forms of ophthalmia which may lead to blindness?

Carefully prepared papers were read by Dr. Eloui Pasha, secretary general of the permanent committee of Cairo, who made the suggestion that the treatment of ophthalmia be obligatory, and the operations recognized as necessary be made compulsory, as is vaccination. This was so radical that no immediate action could be taken.

Dr. A. F. MacCallan, chief ophthalmic inspector of public health, Cairo, gave a detailed account of the good work that is already being done and outlined a plan for further organized work for the cure and prevention of blindness.

M. Jules Van den Heuval, minister of justice, Belgium, urged the necessity of aiding the blind in Egypt, not alone with words and good intentions but in a financial way and with the united effort of all. He exhorted the wealthy Egyptians to give their charity to the work of caring for the blind, and also asked the tourists to bestow some of

that gold, so useful in seeing the beauties of Egypt, on the same good work. He recommended to the people of all nations the advantage of instructing young women in the care of their children's eyes, that being the first step toward prevention of disease, and he made a strong appeal to the religious bodies, exhorting them to preach hygienic principles and to impose them on their people.

His Excellency Dr. Comanos Pasha, of Athens, added:

> Minister Van den Heuval has most wisely said that the priests should advise women at the time of their marriage to give the most scientific care to their children. I wish to add my voice to his in persuading our colleagues in this congress who belong to the Mussulman faith to join us in endeavoring to convince the imans and the sheiks of Islam of the necessity, in the interest of their country, of preaching plainly in the mosques and in the school of Cadiz the dogmas of their religion concerning hygiene, because there is no religion in the world in which hygiene and the care of the sick are more highly prized than in the Mussulman. This expedient which I propose is a powerful one and would be of enormous value in the prevention of the blindness so prevalent in this country.

The proposal was applauded and carried immediately.

Third question.—Has the adoption of Esperanto as the universal language for the blind been applied, and in the affirmative case, what are the practical results it has produced?

Interesting papers in favor of teaching Esperanto to the blind were read by Prof. Dor, of Lyon, and Brother Isadore Clé, of Woluve St. Lambert, Brussels. Miss Giffin said in America Esperanto is considered a recreation rather than a practical aid to the blind. It broadens the horizon, through correspondence in Esperanto with people of different nations, and is therefore greatly enjoyed.

Fourth question.—Stenography being useful to the blind, what is the preferable method, applicable to all languages, for them to learn?

Brother Isadore Clé spoke in favor of stenography for the blind, and Miss Giffin told of the successful use of stenography by the blind of England, who become expert enough to have offices at the railway stations where business men can dictate letters before going to the city, and upon their return receive the correctly typewritten letters. This practice is also growing in America.

Fifth question.—What are the best professions and trades to enable the blind to earn their living?

Rev. Amadeus Stockmans suggested music in many forms, i. e., organists in churches, teachers of musical instruments, artist musicians for concerts and soirées, and composers; also teachers of languages. The following trades and occupations were mentioned in the discussion: Making brooms and mattresses, manufacturing chairs, sofas, tea tables, baskets, etc., of willow and rattan; weaving portières, draperies, curtains, sofa-pillow covers, rugs, and carpets; shoe making and mending; cigar making; knitting and crochet; and sewing by machine and by hand. Massage is taught very thoroughly

in London and positions secured for graduates in numerous hospitals or as hydropathists. In Japan massage is one of the principal occupations of the blind.

Sixth question.—What are the best games and physical exercises to introduce in schools for the blind?

Brother Isadore Clé read a paper on the necessity for outdoor games that will develop the muscles and lungs. Through these exercises the brain will be strengthened. Indoor games, for inclement weather, were numerous, only a few of them being mentioned here, i. e., dominos, cards, game of authors, hide and seek (game of Shakesperean characters), chess and checkers, alphabet cards for word building, parcheesi, billiards, dancing, roller skating, swimming, puss in the corner, blind man's buff, etc.

The delegate from the United States told about the meeting of the Inter-Blind School Athletic Association at the Pennsylvania school at Overbrook, where teams from the schools for the blind at Boston, Batavia, Pittsburgh, and Overbrook competed in running and swimming races, the broad and high jump, throwing the hammer and putting the shot, exercises on the trapeze, vaulting poles and horse, and in tumbling, wrestling, etc. The Baltimore and Overbrook schools for the blind have closely contested football games which are as greatly enjoyed as those of Harvard and Yale Universities.

Seventh question.—Is it advisable to make any modifications in the Braille system now in general use through Europe and the Orient?

Brother Isadore Clé explained the excellence of the Braille system, which is systematically arranged and is easy to read and write. The sense of the congress was that the alphabet should remain intact, as any changes would prevent the unity of writing by the blind in all countries. Attention was called to the fact that the nations are trying to adopt one system (Roman letter) for the seeing people, i. e., the Germans are permitting the use of both kinds of type and both kinds of script, and the Russians and Japanese are considering a similar move in the near future.

Eighth question.—May not the blind replace the seeing in telephone and telegraph bureaus?

Rev. Amadeus Stockmans voiced the opinion of the congress by saying it was impractical for the blind to replace those with sight in such positions. In the discussion, mention was made of successful operators in New York City and several English cities.

During this session Ahmed Bey Zaki, the secretary of the council of ministers, made an interesting address and showed a specimen of an alphabet in raised Arabic characters, by which blind Arabs read. He said:

> This method of writing and reading has been employed by Arabs for six centuries. We say that it is to a son of the Orient that the honor is due for having conceived and

executed a raised alphabet for the blind. This celebrated blind man, the forerunner of Braille, was Aly Ben Ahmed El Amidi, native of Mesopotamia. Being very intelligent, he gave himself up to science and left to posterity some astonishingly well-composed works. He was a professor at the Moustanarieh University, founded originally at Bagdad. He was an accomplished linguist, speaking fluently Mongolian, Turkish, Persian, and Greek.

To prevent the raised characters from flattening he was careful to stick on the same page a card of the same thickness, thanks to which the letters were entirely preserved.

The good fortune of the propagation and spread of the system of Al-Amidi is due to Louis Braille, the immortal blind Frenchman, whose glory will certainly not be lessened because he had in Al-Amidi an Arabic forerunner.

In conclusion, Zaki Bey proposed that the last session of the Fifth International Congress for the Amelioration of the Lot of the Blind, gathered on the banks of the Nile, under the auspices of His Highness the Khedive, Abbas II, be considered a fête of the sixth centenary of Al-Amidi, the veritable inventor of embossed writing for the blind.

At the close of the session a copy of the Biographical Dictionary of the Blind was presented to each delegate and member of the congress by Zaki Bey.

M. Amine Bozari, a blind musician, presented a paper urging the establishment of a school for teaching the blind to play the flute and the oud (oriental mandolin). Another blind man, N. Sabh Antoum, exhibited a device for writing in straight lines by the blind. Mr. Walter C. Holmes exhibited a typewriter which can be easily used by the blind. Mention was made by Miss Giffin of the State commissions and associations for the prevention of blindness, which are most useful in educating the public by illustrated lectures and literature on this important subject in the United State of America. M. Van den Heuval, president of the congress, proposed the organization of an international bureau of information, with the object of bringing nearer and putting into closer relation the schools and institutions for the blind and to make public the progressive methods employed by each. This proposition was immediately accepted.

Rev. Amadeus Stockmans then congratulated all his colleagues on their united efforts. He regretted that the short period of the congress had made it impossible to go deeply into many important questions. In conclusion he thanked the "congressionists" for the work executed in common.

In conclusion I would state that the curse of Egypt is blindness, one of the most fruitful causes of which is the innumerable flies, which are never brushed from the eyes of babies, and are allowed to die in the eye. In former times, it is said, the mothers, to prevent conscription into the army, would pierce one of the eyes of their boy children. Under the present régime they may enlist for a term of years, after which time they can return to their homes, so the practice of blinding one eye is decreasing. There is also a superstition about children

being admired by strangers, and the mother often injures one eye of the child to prevent the Evil Spirit from wanting him.

The census of 1907 gives 148,280 blind of both sexes, but it is stated that the number should probably be doubled. There are 39,000 blind children, and the work of prevention of blindness is greatly needed.

Under the excellent supervision and direction of Dr. MacCallan, chief ophthalmic inspector, public health, splendid work is being done through traveling hospitals which sail up the Nile in picturesque dahabeahs, camping along the route in tents pitched beneath the feathery palms. The Arab seems to prefer being treated by oculists and surgeons who employ primitive modes of travel and domicile rather than going to the best equipped hospitals.

At the close of the opening ceremony at the Khedivial Opera House the "congressionists" were escorted to Zeitoun for a visit to the institution for the blind, and were escorted through the buildings and palm garden where the pupils were engaged in various lessons and occupations. The Institution for the Blind, Zeitoun, Cairo, was founded in 1901 through the generosity of the late Mrs. T. R. Armitage of London, whose son and daughter continued to maintain it during its earlier years. In October, 1905, the institution passed under the control of a representative committee in Cairo, of which Mr. Arthur D. Alban, H. B. M. consul, is chairman. The institution is nonsectarian and has received valuable help from His Highness the Khedive and Lord Cromer (while resident in Egypt). Its usefulness is recognized by the Egyptian Government, the Administration of Moslem Wakfs, and the Orthodox Coptic Patriarchate, each of which has granted an annual contribution towards its support.

Blind boys of any religious persuasion are received and educated. The course of study includes instruction in reading, writing, grammar, arithmetic, geography, and history. These are all Arabic studies. English is taught, partly as a mental discipline, though it is believed that a knowledge of the language will be of use to the boys. The English studies include reading, writing, and conversation. Moslems are taught to recite the Koran and also receive instruction in the principles of their religion. The Copts likewise receive religious instruction and are taught to chant the service of the Coptic Orthodox Church. This leads to lucrative positions in mosques and churches and at weddings and funerals.

It is the object of the institution to make pupils wholly, or in part, self-supporting, and they are taught chair caning as soon as possible after their entrance, as it has been found that the sooner the pupils can be set at this work the quicker they are to learn to use their hands. It teaches them perseverance and method and from the beginning leads them to regard their training as a means of self-support. The

trades besides chair caning are basket and chair making and making brushes of all kinds and sizes.

The institution also produces books in Braille character, embossed by machinery, and is the only producer of such books for the Arabic-speaking blind of Egypt.

REPORT OF THE SAME CONGRESS BY MR. WALTER G. HOLMES, MANAGER OF THE MATILDA ZIEGLER MAGAZINE FOR THE BLIND, ACCREDITED AS A NATIONAL DELEGATE TO THE CONGRESS.

The work of the convention was largely of an informal character, and the benefits derived by the visitors from other countries than Egypt at this meeting came more from the individual exchange of ideas than from the direct work of the meeting itself, for the work of the meeting was devoted largely to discussing means for the prevention and cure of blindness in Egypt, in which country there are about 30 times as many blind persons in proportion to population as this and other western countries have.

The great problem in Egypt, therefore, is prevention and cure, especially in view of the fact that it is considered in Egypt that anything more than a limited education of the blind would result in more harm than good in educating the blind away from their families and surroundings.

The farming classes of Egypt live in a most simple way, in mud huts without flooring, the chickens, sheep, and other cattle often occupying the same rooms with the people.

The School for the Blind at Zeitoun, a suburb of Cairo, has about 40 pupils, who are housed and cared for during the school term. The effort is made to maintain these children in such a way that they will not become dissatisfied after returning to the simple lives which they will have to lead in their homes. For instance, the bed on which the children sleep is a little wooden platform, raised at one end, covered by a strip of Japanese matting. They lie on this, having one blanket for covering. At first this seems harsh treatment, but, everything considered, it may be best for the child and its future. It is stated that many a blind child educated at the State institutions has been rendered very unhappy on returning to his simple rural life after years of comfort and refined surroundings at the school.

A number of causes contribute to the great number of blind in Egypt, but the main cause is probably a lack of cleanliness. There is a superstition among the mothers that if a child is bathed it will die, and their rule is never to bathe a child until it is 2 years old.

At the meeting educational matters were not so much discussed as were the general problems pertaining to the blind, such as what employment is best for them in earning a livelihood, games, etc., for

their amusement. It was the sense of the meeting that in those countries which use what is known as European or Universal Braille, it should not be changed or interfered with, and the meeting decided that Esperanto had not progressed far enough as a world language to recommend the blind taking it up, except as a pastime and diversion.

So far as Egypt is concerned the meeting should prove very helpful to the cause of the blind, especially in that it aroused the whole country to an interest in the blind. The fact that the meeting was under the auspices of His Highness, the Khedive, gave it a prominence which attracted attention of the entire country, and most of the high officials of Egypt participated in the proceedings of the meeting.

The Khedive gave a special reception to the national representatives attending the congress and, addressing them in French, thanked them for the interest they had taken in the matter. As the American delegates retired from the room, the Khedive addressed them in English, expressing especial gratification that the United States had sent representatives to the meeting to advise and help them in their great problem of helping their blind. Most of the leading countries in the world were represented at the meeting, and several of the South American countries sent representatives.

The resolutions adopted by the congress included the following declaration of purposes:

The committee will endeavor to organize an international bureau, with the object of bringing nearer and putting into closer relation the schools and institutions for the blind and to make public the progressive methods employed by each.

The bureau will publish a periodical for the interchange of ideas, with the concurrence of schools, institutions, and persons interested in the welfare of the blind.

ADDITIONAL INTERNATIONAL CONGRESSES.

The dates and places of assembly of additional international congresses of which notice was received at the Bureau of Education were as follows:

International Congress of Music, Rome, Italy, April 4–11, 1911. The official delegates from the United States were Dr. A. J. Gantvoort, manager of the College of Music of Cincinnati, Cincinnati, Ohio, and Mr. O. G. Sonneck, chief of the music division, Library of Congress, Washington, D. C.

Second International Congress on Child Welfare, held in Washington, D. C., April 25 to May 2, 1911, under the direction of the National Congress of Mothers and Parent-Teachers Associations.

The national importance of the subject of the congress was emphasized by the participation in its proceedings of Hon. James Bryce, the British ambassador; Mr. Merrigio Serrati, representing the

Royal Italian Government; Mr. Paul Hegemans, representing the Belgian League of Home Education and the Royal Government of Belgium; and Dr. Elmer E. Brown, Commissioner of Education of the United States.

At the close of the congress, Mrs. Frederic Schoff, of Philadelphia, Pa., was reelected president of the National Congress of Mothers, and Mrs. Arthur A. Birney, of Washington, D. C., corresponding secretary.

International Gymnastic Contest, held in connection with the fiftieth anniversary of the proclamation of the Kingdom of Italy, at Turin, May, 1911. Wide publicity was given to this event, in the United States, through the medium of the Amateur Athletic Union.

Fifth International Congress for Thalassic Therapeutics, Kolberg, Prussia, June 5–8, 1911.

International Congress for Physical Education, Odense, Denmark, July 7–10, 1911. The official delegate from the United States was Stratton D. Brooks, A. M., superintendent of public schools, Boston, Mass.

Fifth International Congress on Assistance, Antwerp, Belgium, July 16, 1911. The president of the congress was M. Prinz, inspector general at the Department of Justice. The official delegates from the United States were Edward Thomas Devine, LL. D., general secretary of the charity organization society of New York City, and Prof. Graham Taylor, president of the executive committee of the board of trustees, Chicago School of Civics and Philanthropy, Chicago, Ill.

First International Congress of Pedology, held at Brussels, Belgium, August 12–18, 1911, under the presidency of Dr. Desquin, member of the Belgian Royal Academy of Medicine and of the board of education of the city of Antwerp. Dr. O. Decroly, director of the Pedagogique Institute of Brussels, was vice president. The United States Bureau of Education was represented at the congress by Theodate L. Smith, Ph. D., librarian in the children's institute of Clark University, Worcester, Mass.

International Congress of the Deaf and Dumb and their teachers, Rome, Italy, August 22–24, 1911.

Tenth International Congress of Geography, Rome, Italy, October 15–22, 1911. The official delegates from the United States were Mr. Robert Bradford Marshall, chief geographer, United States Geological Survey, Washington, D. C.; Prof. William Morris Davis, of Harvard University, Cambridge, Mass.; Prof. Thomas L. Watson, Ph. D., of the University of Virginia, University, Va.; Dr. William Libbey, of Princeton University, Princeton, N. J.; Prof. Ralph Stockman Tarr, B. S., of Cornell University, Ithaca, N. Y.; Prof. James Howard Gore, LL. D., member of the board of managers of the National Geographic Society, Washington, D. C.; and Prof. Frank Carney, Ph. D., of Denison University, Granville, Ohio.

INTERNATIONAL HYGIENE EXHIBITION, DRESDEN, 1911.

An International Hygiene Exhibition was held at Dresden during the present year, beginning May 1 and continuing till October 1. The object of the exhibition, as set forth in the official announcement, was to bring "before the professional world and the general public the acquisitions of modern hygiene in the form of a comprehensive and universal exhibition, an ideal which for years had been warmly agitated in hygienic circles." The project assumed definite shape at Dresden in 1906, on the occasion of a convention of persons prominently identified with efforts for the promotion of public health. In this convention the motion to hold a hygiene exhibition was unanimously carried, and it was also voted that it should be international; the choice of a locality fell upon Dresden.

The success of the enterprise was assured from the outset. The King of Saxony gave it the full weight of his name and influence, and eminent officials, among them, the chancellor of the empire, and the minister of the interior for Saxony accepted the title of honorary president Under these favoring circumstances, liberal responses were obtained to the appeal for the financial guaranty of the undertaking, the State government and the city of Dresden contributing freely and the citizens pledging 1,000,000 marks ($238,000) for the fund. The city also offered the free use of a spacious building for the exhibition. The entire arrangements were in charge of a strong committee under the presidency of K. A. Lingner, privy counselor for commercial affairs, Dresden. With him were associated a number of men, distinguished as specialists or administrators. An elaborate plan for the exhibition was formulated, comprising nine well-defined sections or groups, together with five additional special groups, and a historical department.

The introduction to the official circular called attention to the extraordinary development in hygiene in the quarter of a century that has elapsed since the last general hygiene exhibition was organized in Germany.

> At that time hygiene was still an infant science for which as yet no chair was provided in most universities, a science in modest attire, which was considered by many as hardly complete.
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> Not only does every university of to-day possess its own hygienic department, but also in all civilized states numerous stations have been established for the science of hygiene. Grand discoveries, especially in the province of bacteriology, enable us to save thousands and thousands of precious human lives. Technics and industry vie with each other in all fields in the application of hygiene to practice. In many cases legislation feels compelled to observe in its measures the precepts of hygiene; and the social ideas of our century have been led by hygiene into new paths, to those imposing movements which aim to increase the pleasure of living and the working strength of mankind and to preserve nations from the dissipation of high values.
>
> Irresistibly, hygiene penetrates all phenomena of human life and its realm expands from day to day.

Because of this development it is impossible for even the specialist in hygiene to keep informed as to the total province of the subject, and it is, therefore, of great service to him to have brought before him "the results and acquisitions of recent investigation displayed as a well-ordered, systematic whole, in the form of an exhibition."

In the general plan of the exhibit, Group VIII was assigned to children and adolescents, and here school hygiene was brought into relation with the entire environment of the young, beginning with the earliest stage of infancy and continuing to the conditions affecting minors after the school period is closed. It is noticeable that the intellectual side of school life was included in this presentation as well as the sanitary requirements of school buildings, provision for physical training, recreation, etc.

The thoroughness of the preparation for this important exhibition is indicated by the establishment of a "News Bureau," from which was issued a leaflet entitled *Hygieia*. One number of this leaflet stated that the collection of statistics alone, brought together by the German Government for this occasion, cost approximately $70,000.

According to fragmentary reports of the exhibit, which have appeared in the current journals, the original plans were fully carried out and on a magnificent scale. School hygiene was well represented both in the general sections and in special national exhibits. All divisions of the subject were fully illustrated by models, photographs, plans, and exhibits of apparatus.

Among features of interest to specialists were the presentations relative to humidity in schoolrooms and the problems of fatigue. With reference to the former one reporter notes:

> It was shown by numerous diagrams that symptoms of heat collapse and fatigue are liable to occur in a room the temperature of which is above 68° F. or the relative humidity in excess of 50 per cent, although there may be little carbonic acid in the air; though, if the temperature and moisture be low, as much as 15 parts per 1,000 of carbon dioxide may pass unnoticed. * * * The general conclusion reached is that the temperature in a classroom at the beginning of lessons should not exceed 61° F., and that at no time should it exceed 67° F.[1]

In relation to the effects of fatigue, the work of Lorentz and Weichardt on the fatigue toxin received prominent notice. From the diagrams presented, "an apparent gain in working capacity appeared in classes working in rooms which had been sprayed with the fatigue antitoxin."[2]

It is the purpose of the organizing committee to set forth the total results of the exhibition in extensive publications, so that specialists and educators of all nations may profit by this unequaled presentation.

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[1] See International Hygiene Exhibition, by Britannicus, School Hygiene, No 8, 1911, pp. 423–425.

[2] Über Resultate der modernen Ermüdungsforschung und ihre Anwendung in der Schulhygiene, von Friedrich Lorentz, Berlin. Zeitschrift für Schulgesundheitspflege, Nr. 1, 1911, pp. 1–28.

CHAPTER XXII.

REPORT OF THE FIRST UNIVERSAL RACES CONGRESS, HELD AT LONDON JULY 26–29, 1911.

By Felix Adler,

Delegate representing the United States Bureau of Education.

This congress was held in London from July 26 to July 30, inclusive, of the present year. The object of the congress was, in a broad and deep sense, educational. The ends of the earth came together for the purpose of considering how the antagonisms and antipathies that breed hate between different races might be lessened and eventually overcome; and this question it was proposed to discuss, not on sentimental grounds, but on the basis of science and with the help of the experience of practical statesmen and educators.

The sessions were held in the large hall of London University. Lord Weardale was president of the congress, Hon. William Pember Reeves, chairman of the executive council, the writer of the present article, president of the general committee, and Dr. G. Spiller was the organizer and secretary. To his extraordinary administrative capacity and his remarkable devotion the actual success of the congress was largely due. There were 2,100 members—1,200 active and 900 passive members. Seventeen Governments were officially represented. Hindus were present in considerable numbers, such splendid figures as that of Principal Brajendranath Seal among them.

The Maharajah of Baroda presided at one of the meetings. Hadji-Mirza Yahyah represented Persia with oriental dignity and charm of manner. The Chinese delegate impressed the audiences as one of the brainiest and most energetic personalities of the congress. The Turkish delegation was conspicuous. The Government of Turkey finds itself face to face with problems created by the juxtaposition of alien races within the Empire, and hence the Young Turks are supremely interested in the very questions on which the congress was engaged. Gen. Légitime represented Haiti; Dr. de Lacerda, Brazil. The first colored member of the South African Parliament was present, a man of coal-black skin, tall, well built, highly intel-

ligent, belonging to a tribe that not so long ago were reputed to be fiercer than even the Zulus. Many negroes of the United States were also present, with Dr. Du Bois at their head. Russia, Germany, France, Italy, Spain, Greece were all represented by distinguished personalities. It will thus be seen that the congress was not only a congress for the races, that is, for their benefit, but a congress of the races, and this indeed was one of its characteristic features. The ends of the earth were called together to deliberate how one of the greatest obstacles to the progress of mankind as a whole might be removed.

REASONS FOR THE ASSEMBLING OF THE CONGRESS AT THIS TIME.

Race antipathies have always existed within the borders of occidental civilization, as, for instance, between the Czechs and Germans, the Poles and their neighbors, the Jews and Gentiles; and the difficulties created by such antagonisms is an ever-present danger within the bosom of western civilization. But aside from this constant source of difficulty, there are at present two outstanding reasons why the problem of inter-racial relations demands attention. One is the near approach to one another of the Occident and the Orient, due to greatly increased facilities of transportation and communication. The other lies in the fact that the nations of Europe and America are assuming to an unprecedented extent the responsibility of ruling races less advanced than themselves or wholly backward races. In the one case there is the danger, not only of war, or of the so-called yellow peril, but also danger that the influx of western civilization may undermine the basis upon which the civilizations of the East have been built, without supplying any adequate substitute. In the other relation of the civilized to the primitive races there is the danger of ruthless exploitation (the cruelties attending the rubber trade on the Kongo are still fresh in everyone's memory, and of the virtual enslavement of the subject peoples.

It should be noted that the spirit in which the congress met was not that of oversanguine optimism. The prevailing mood was not that of persons believing that mankind is on the homestretch toward the millenium. Nor did the illusion prevail in the minds of the leaders of the congress that a meeting of this sort or of a few others like it could change enmities into universal amity. It was rather under the heavy pressure of the sense of great and novel perils threatening mankind that the congress met. An entirely new situation has been created by the conditions now existing in the Far East, and by the partition of Africa. How shall this situation be met? What redemptive agencies can be set in operation, however gradually, to modify the forces that make for mutual distrust? Something must be done; something must at least be begun to diminish if not wholly

to avert the peril. Such reflections as these determined the temper by which the deliberations of the delegates were colored. And the subjects discussed, the measures considered, were, as under the circumstances they could not but be, in the broad sense educational.

Science, it was generally agreed, might be of great service. The majority of anthropologists, for instance, now favor the monogenetic theory of the origin of the different races. Differences which were at one time supposed to be radical, such as the difference in the shape of the skull or the color of the skin, are regarded as modifications of the same paleolithic type, due to causes acting from without rather than to intrinsic dissimilarities. If the different races are so many branches of the same stock, if there is no reason for supposing that the essential human faculties are lacking even in the most primitive groups of human beings, if, in particular, the obvious unlikenesses, as of color, thickness of the lips, etc., can not be viewed as signs of inherent inferiority, then at least one of the principal arguments, or rather pretexts, for the proud scorn of one race by another is destroyed. Those whose passion or whose greed leads them to violent and oppressive conduct toward millions of their fellow beings can no longer justify their proceedings by the plea that those whom they misuse are less than human or perhaps half human, or that they represent at any rate a baser type of the human species, and that therefore they may properly be assigned to the function of hewers of wood and drawers of water. The congress from beginning to end reiterated the dictum of the essential unity of the races of mankind. The chief addresses were so many variations of this single theme. It was felt that the greatest step forward would be taken if this one idea could be driven home so as to become common property, and, of all the practical measures which it was proposed that the congress initiate, the same idea was the foundation. The thesis of the essential unity of mankind, however, was not taken in the sense of universal sameness, it was not understood to mean that each of the several component groups of humanity is capable of reaching the same degree of excellence along every line. The unity spoken of is an organic unity. It implies that the same essential faculties are present in all, and that it is to be assumed that every group is capable of contributing to the common stock something uniquely its own, something that in the full fruition of civilization can not be spared.

The papers contributed to the congress were published in book form and were ready for distribution a week or two before the first session.[1] Among these papers, those emanating from men of science

[1] The book, under the title "Inter-Racial Problems," can be obtained at the World's Peace Foundation, 29A Beacon Street, Boston, Mass.

and those contributed by British proconsuls attracted, perhaps, the widest attention. Sir Charles Bruce, ex-governor of Mauritius, in writing on "The modern conscience in relation to treatment of dependent peoples and communities," goes on record as saying that "the modern conscience demands the extension of the principles which have established this (occidental) civilization in its relations with the East." And, again, "The conflict between West and East must be adjusted on the same principle that has adjusted the conflicts of race and creed in the West. * * * History, reason, and recent experience in Japan warn us that the adjustment must be made not in the spirit of the popular refrain 'East is east and west is west,' but in the spirit of a nobler poetic formula:

"God's is the Occident,
God's is the Orient.

"This is the spirit of modern conscience in the treatment of dependent peoples and communities."

Sir Sydney Oliver, governor of Jamaica, points out the heavy burden imposed on African peoples by the taxes required to support the kind of civilization which the white man seeks to impose among them and he plainly intimates his doubt whether the social, industrial, and religious ideals of the West are destined to prove suitable to the races to whose molding they are applied. This, of course, need not imply radical inferiority on the part of the African peoples, but rather differences of environment and possibly of preponderant natural endowment which may render adequate development impossible along the lines arbitrarily prescribed. The distinction which was once drawn between "day races" and "night races" and "twilight races" presupposes that there are certain human beings who represent the supreme type to which all others may more nearly or more distantly approximate. It presupposes that there are children of the sun and children of the night and between them those who represent the dim approach, the faint ascent, from the lower level to the highest. The proposition that the social, industrial, and religious ideals of Europe are not suitable to African peoples involves no such discrimination as this, for they may develop, and under the right influences will assuredly develop, social, industrial, and religious ideals of their own.

Attention should also be directed to the paper of Sir Charles W. Dilke, which was written shortly before his death, in which he issues an impressive warning on the subject of recrudescence of slavery under more or less disguised forms: "It is, indeed, not easy," he says, "to feel certain whether the antislavery cause has lost or gained ground in our time. * * * The moment is one at which there is a real risk of general recrudescence of slave conditions in disguise."

THE RESULTS OF THE CONGRESS.

The most important of these was the appointment of a committee instructed to bring about the establishment of an international institute having for its aim to continue in systematic fashion the efforts begun by the congress.

The objects of this institute are the following:

I. To educate the public opinion of the world on the subject of the essential unity of mankind by encouraging the production of scientific papers similar to those published in the book of the congress and larger monographs and treatises on kindred subjects. The institute is to do strictly scientific work. Further, the institute is to pursue the same end by spreading the results achieved by the scientists in the form of popular tracts or of articles disseminated through the newspaper press. Also the writing of books and articles is to be encouraged which have for their aim to popularize the knowledge of the best traits of the peoples of the East among the nations of the West, and conversely, in order to engender mutual respect on the basis of mutual discriminating appreciation. It is also hoped that influence may be exerted to introduce the benevolent study of foreign types of civilization, especially among persons who are preparing to enter the diplomatic and colonial service. A friendly attitude toward foreigners and an understanding of the excellent qualities of the literature, art, and institutions of the people to whom they are sent would not only render them more useful to their own nation, but would make their influence more beneficial to those with whom they come in contact.

II. The International Institute is intended to a certain extent to fill a gap left vacant by The Hague Tribunal. The Hague Tribunal concerns itself only with complications which arise between sovereign nations. It can not intervene to remedy or even take cognizance of instances of crying injustice that may occur within a sovereign nation, as between the ruling and the subject classes of the population. But, the world over, the relations between oppressed groups within independent states, or groups which regard themselves as oppressed, with their oppressors are becoming more and more strained, and this is undoubtedly one of the causes of the universal unrest of which Lord Cromer speaks in his book on Ancient and Modern Imperialism. There is plainly needed a new kind of forum in which the griefs and grievances of those millions of human beings who are impotent to help themselves may be considered from the standpoint of right and truth. This forum can not be a court; no court could possibly be devised which shall exercise jurisdiction in the domestic affairs of sovereign states; but a bureau of information may well be created

which shall impartially investigate the conflicting claims of parties to controversies of this kind, publishing authorized statements from both sides, and perhaps sending investigators of its own to collect the best available information on the spot. The ideal purpose of such a bureau would again be educational, namely: To instruct public opinion. And public opinion, especially the concentrated public opinion of the world to-day, is a force which, if rightly directed, will prove well-nigh irresistible, even in those cases where the situation seems at first most unpromising. The obvious reason why at present public opinion does not actually exercise its complete effect is because it is not sure of itself and therefore hesitant. The sources from which it is derived are often impure; the press especially is frequently employed by those whose interest it is to misrepresent the facts. Thoughtful people everywhere know that this is the case and therefore shrink from expressing themselves with decision, when if they felt they had the right to do so on the basis of reliable information their voices would be heard with no uncertain sound and carry the greatest weight. I cite as one instance the attitude of the world's public opinion toward the Young Turks to-day. Are the statements in the newspapers which put them in a bad light inspired by the sinister influences of those whose selfish interest it is to see the reform movement in Turkey miscarry, or are the Young Turks in fact following in the evil footsteps of their predecessors? Outside of the few who have access to first-class information, who to-day would venture an opinion? An international bureau of information having at its head responsible men of undoubted character and ability, and with abundant resources at its command, might be expected to secure information which in such and similar cases would put us all in a better position to judge.

III. The third object of the International Institute is to encourage and if necessary to subsidize what may be called experiments in the pedagogy of backward races. An example of what this means may be found in the account of the Batak Institute, at Leyden, by Dr. Nieuwenhuis, on page 259 of the Proceedings of the Congress. "Colonial powers," says Dr. Nieuwenhuis, "know, as a rule, far too little of the people of different races under their sway to be able to maintain an intercourse with them that may be called rational in all respects or to establish a rule in harmony with the opinions of the subject-race and the popular institutions based on them." The Bataks are a tribe living in the northern part of Sumatra. The work of the Batak Institute has been carried on from 1905 to 1911. Its aim is to collect as complete a body of information as possible about the Batak people, its local conditions and needs, and then to undertake practical measures intended to promote the economic and general progress of the natives. In the season of 1911 practical agriculturalists were

sent to the Karo Plateau, in the district of the east coast of Sumatra, in order to assist in improving the cultivation of rice and to stimulate the growth of produce such as is likely to find market in the lowlands.

Similar institutions with perhaps somewhat wider aims might be established in the interests of other peoples and tribes.

Mention also should here be made of the excellent work which the United States Bureau of Education is doing in developing the reindeer industry of the Eskimos in Alaska; that is, in assisting the economic development of a backward people in such a way as to take due account of their surroundings and opportunities, of their needs and capabilities.

The International Institute is to be established at London; both because that city more than any other capital is in intimate touch with all the different quarters of the globe, and because it will be easier there than elsewhere to find representatives of different countries permanently or temporarily resident, and, consequently, able to take part in the councils of an international organization. The nucleus of the governing body of the International Institute will undoubtedly consist of Englishmen, but the composition of the institute will nevertheless be broadly international. The practical success of the program above outlined will depend on our finding men of great probity and eminence who will be willing to accept membership on the governing body, and also on the possibility that persons of very great wealth may come to realize the far-reaching benefits which such an institute is competent to confer and may be ready to place abundant means at its disposal.

Enough has now been said to give a general idea of the scope and animating spirit of the meetings, and especially to dispel the suspicion of sentimentalism, if it has existed in the mind of the reader of these pages. For those who are interested in education, special allusion may perhaps be made to Prof. Mackenzie's paper on "Ethical Teaching in Schools with Regard to Races," pages 433–439. He discusses the subject under five heads:

1. How may moral education cultivate the conception of human personality and its rights?

2. Moral education should lead to an appreciation of the essential likeness of the various races and classes, in spite of their points of superficial differences.

3. It is qualities of character that form the real basis of superiority in men or nations.

4. That different peoples, different classes, different sexes, and so on, have each a distinctive type of personality with a distinctive value of its own.

5. The identity and the comprehensive character of the human ideal as evolved in a number of different forms.

In conclusion, a word should be said of the educative effect of the congress upon those who participated in it. This, if the writer is to judge from his own observation, was exceptionally deep and is likely to prove lasting. At one of the preliminary conferences that preceded the opening session there were gathered in a committee room some 50 delegates of different color and coming from Asia, Africa, Europe, and America. Merely to find oneself a part of such a body of human beings was a most impressive experience. And then to listen to what was said; to see the Persian, Hindoo, the Chinaman, the Turk, the dark-skinned South African Negro arise one after another and express in the language of cultured men the thoughts and ideals of one's own belief and aspiration could not but convert the bare theoretical notion of humanity which we all harbor into a potent realized conviction. And the mere contact during eight consecutive sessions and on equal terms with men and women of such dissimilar origin who yet shared a common outlook could not but have a practically educative effect of the greatest value. Such congresses, therefore, ought to be repeated. If the changes they effect in the outside world can only be slow, the good they would do to those who take part in them would be immeasurable.

Again, those who came to the congress smarting under the sense of wrong could not fail to have their moral horizon widened as they followed the proceedings. For they could not but recognize that their specific grievance is but one item in the sum of evil which man suffers at the hands of his fellow man—one manifestation of that spirit which the progress of civilization must cast out. The grievance of a single group, no matter how justly resented, is apt to produce a certain collective selfishness in the members of that group, concentration on their own sufferings, and comparative indifference to equal or greater suffering afflicting other groups. The congress was, as it were, a theater of humanity. The curtain rose and displayed a vast scene; one after another there appeared dimly-outlined ghosts of men, sorrow bowed and making mute appeal. We peered, as it were, into the depth of great realms of darkness. But we saw also the light and the standard bearers of it beginning to penetrate into that realm.

One may be sure that such a spectacle as this could not but tend somewhat to counteract that collective selfishness of which I have just spoken. The American Negro, for example, preoccupied with the disabilities of the ten millions of his own race living in the United States, could hardly fail to gain a new perspective by thinking of the condition of one hundred and twenty million negroes of Africa.

Similar reflections must have obtruded themselves on the mind of the Russian Jew; and even the socialist and the social reformer, whose whole mind is concentrated on bringing about economic changes within civilized lands and who is always tempted to confound the interests of the wage earners in civilized lands with the interests of humanity at large, will perhaps have been compelled to pause and acknowledge to himself how immense is the problem with the fringe of which, and only a fringe, he is dealing. I do not, of course, for an instant imply that we should therefore be less zealous and less concentrated upon that portion of the field which it is appointed to us to till, or that we should feel less earnestly that in attempting to solve a fraction of the problem we are contributing what we can to the solution of the whole. I only mean that we should see our work *sub specie humanitatis*, and I venture to express the belief that such undertakings as the Universal Races Congress help us to do so.

CHAPTER XXIII.

EDUCATIONAL DIRECTORY.[1]

I.—Chief State School Officers.

Name.	Address.	Official designation.
Henry J. Willingham	Montgomery, Ala	State superintendent of education.
C. O. Case	Phoenix, Ariz	State superintendent of public instruction.
George B. Cook	Little Rock, Ark	State superintendent of public instruction.
Edward Hyatt	Sacramento, Cal	Do.
Mrs. Helen Marsh Wixson	Denver, Colo	Do.
Charles D. Hine	Hartford, Conn	Secretary of State board of education.
Theo. Townsend	Dover, Del	Do.
W. M. Davidson	Washington, D. C	Superintendent of District schools.
W. M. Holloway	Tallahassee, Fla	State superintendent of public instruction.
M. L. Brittain	Atlanta, Ga	State superintendent of schools.
Grace M. Shepherd	Boise, Idaho	State superintendent of public instruction.
Francis G. Blair	Springfield, Ill	Do.
Charles A. Greathouse	Indianapolis, Ind	Do.
A. M. Deyoe	Des Moines, Iowa	Do.
E. T. Fairchild	Topeka, Kans	Do.
Ellsworth Regenstein	Frankfort, Ky	Do.
T. H. Harris	Baton Rouge, La	State superintendent of public education.
Payson Smith	Augusta, Me	State superintendent of public schools.
M. Bates Stephens	Annapolis, Md	State superintendent of public education.
David Snedden	Boston, Mass	State commissioner of education.
Luther L. Wright	Lansing, Mich	State superintendent of public instruction.
C. G. Schulz	St. Paul, Minn	Do.
J. N. Powers	Jackson, Miss	State superintendent of public education.
William P. Evans	Jefferson City, Mo	State superintendent of public schools.
W. E. Harmon	Helena, Mont	State superintendent of public instruction.
J. E. Delzell	Lincoln, Nebr	Do.
John Edwards Bray	Carson, Nev	Do.
H. C. Morrison	Concord, N. H	Do.
Calvin N. Kendall	Trenton, N. J	State commissioner of education.
A. N. White	Santa Fe, N. Mex	State superintendent of public instruction.
Andrew S. Draper	Albany, N. Y	State commissioner of education.
J. Y. Joyner	Raleigh, N. C	State superintendent of public instruction.
Edwin J. Taylor	Bismarck, N. Dak	Do.
Frank W. Miller	Columbus, Ohio	State commissioner of common schools.
Robert H. Wilson	Oklahoma City, Okla	State superintendent of public instruction.
L. R. Alderman	Salem, Oreg	Do.
Nathan C. Schaeffer	Harrisburg, Pa	Do.
Walter E. Ranger	Providence, R. I	Commissioner of public schools.
J. E. Swearingen	Columbia, S. C	State superintendent of education.
C. G. Lawrence	Pierre, S. Dak	State superintendent of public instruction.
J. W. Brister	Nashville, Tenn	Do.
F. M. Bralley	Austin, Tex	Do.
A. C. Nelson	Salt Lake City, Utah	Do.
Mason S. Stone	Montpelier, Vt	State superintendent of education.
J. D. Eggleston, jr	Richmond, Va	State superintendent of public instruction.
Henry B. Dewey	Olympia, Wash	Do.
M. P. Shawkey	Charleston, W. Va	State superintendent of free schools.
C. P. Cary	Madison, Wis	State superintendent of public schools.
Miss Rose A. Bird	Cheyenne, Wyo	State superintendent of public instruction.
Walter E. Clark	Juneau, Alaska	Governor, and ex officio superintendent of education.
Willis T. Pope	Honolulu, Hawaii	Superintendent of public instruction.
Frank R. White	Manila, P. I	Director of education.
E. G. Dexter	San Juan, P. R	Commissioner of education.

[1] Corrected to Dec. 1, 1911, in so far as changes have been reported to the bureau.

II.—Superintendents in Cities and Towns of 4,000 Population and Over.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
ALABAMA.						
Alabama City	4,313	Frank Moody				
Anniston	12,794	David Rhodin Murphy		Oct. —, 1898		
Bessemer	10,864	A. A. Persons				
Birmingham	132,685	John Herbert Phillips	5	July 1, 1883	June 30, 1916	$4,800
Decatur	4,228	J. M. Collier	2	July —, 1905	May —, 1911	1,500
Dothan	7,016	James Vandiver Brown	1	June —, 1906	June 1, 1912	2,500
Eufaula	4,259	Herman L. Upshaw	3	Jan. —, 1911	May —, 1914	1,800
Florence	6,689	James Bothwell Lockhart	2	June 26, 1907	June 26, 1914	1,320
Gadsden	10,557	Walter Evans Striplin	2	Jan. —, 1903	June —, 1912	2,000
Girard	4,214	Wilmer C. Hughes	1	May —, 1910	May —, 1912	1,050
Huntsville	7,611	Robert Ernest Sessions	1	May 25, 1908	May 31, 1912	2,000
Mobile	51,521	Samuel S. Murphy	4	Sept. 1, 1900	Sept. 1, 1912	3,000
Montgomery	38,136	Charles Lewis Floyd	2	July 1, 1889	June 30, 1911	3,000
New Decatur	6,118	William F. Jones	2	July 1, 1909	July 1, 1912	1,600
Opelika	4,734	Floy Hall	1	July 1, 1910	June 30, 1911	1,600
Phoenix	4,555	H. G. Vandiver				
Selma	13,649	Arthur Fort Harmon	1	July —, 1908	June 30, 1912	2,400
Sheffield	4,865	William P. Johnson	1	June 15, 1911	June 15, 1912	1,500
Talladega	5,854	Daniel Archie McNeill	2	May —, 1906	Aug. 31, 1914	1,800
Troy	4,961	John Rankin McLure	1	May 26, 1911	May 20, 1912	1,200
Tuscaloosa	8,407	James Henry Foster	1	July —, 1893	June 30, 1911	2,100
Union Springs	4,055	William Robert Harrison.	2	—— —, 1901	June 30, 1913	2,000
ARIZONA.						
Bisbee	9,019	Charles F. Philbrook	1	Aug. —, 1904	Aug. 31, 1912	3,000
Clifton	4,874	Frank Dykes	1	July 23, 1911	June 1, 1912	1,800
Douglas	6,437	William E. Lutz	1	Jan. 1, 1906	July 31, 1911	2,800
Globe	7,083	O. Staley				
Morenci	5,010	C. A. Goggin	1	Sept. —, 1908	May —, 1912	1,620
Phoenix	11,134	John D. Loper	1	June 8, 1909	June 30, 1911	3,000
Prescott	5,092	Warren Dwight Baker	1	Aug. —, 1908	June 30, 1912	2,200
Tucson	13,193	Sidney Carleton Newsom.	4	June 1, 1908	June 1, 1912	3,000
ARKANSAS.						
Argenta	11,138	D. L. Paisley				
El Dorado	4,202	Thomas C. Abbott	1	June —, 1909	July —, 1912	1,350
Fayetteville	4,471	Frank S. Root	1	—— —, 1905	June 1, 1912	1,000
Fort Smith	23,975	James W. Kuykendall	1	May 25, 1905	June 30, 1912	3,000
Helena	8,772	Samuel Hamilton Spragins.	1	Sept. —, 1901	June 8, 1912	1,800
Hot Springs	14,434	Frank Ward Miller	1	July 1, 1908	July 1, 1912	2,400
Jonesboro	7,123	Dudley T. Rogers	1	Sept. —, 1893	Sept. 1, 1912	1,600
Little Rock	45,941	Robert C. Hall	1	May —, 1909	May —, 1912	2,800
Mariana	4,810	J. H. Andrews				
Paragould	5,248	H. R. Partlow				
Pine Bluff	15,102	Junius Jordon	4	July —, 1906	July —, 1912	2,000
Texarkana	5,655	George Willard Reid	1	June 1, 1910	June 1, 1912	2,400
CALIFORNIA.						
Alameda	23,383	William C. Wood	4	Jan. 1, 1909	Apr. 30, 1915	3,600
Alhambra	5,021	Nathan F. Smith[1]	1	July —, 1908	July 1, 1911	2,400
Bakersfield	12,727	David Whitson Nelson	4	June 30, 1896	June 30, 1914	2,500
Berkeley	40,434	Frank Forest Bunker	4	July 1, 1908	June 30, 1912	4,000
Coalinga	4,199	Osmer Abbott[1]	1	Sept. —, 1910	Sept. —, 1912	2,200
Eureka	11,845	Charles Colfax Hughes	4	May 1, 1911	May 1, 1915	2,500
Fresno	24,892	Charles Laurie McLane	4	July —, 1899	June 30, 1913	3,500
Grass Valley	4,520	J. S. Hennessey[1]	1	July —, 1900	July —, 1911	2,100
Hanford	4,829	Mrs. Nannie Ellis Davidson.	4	Jan. —, 1903	Jan. —, 1915	1,800
Long Beach	17,809	James Duncan Graham	4	July 1, 1907	June 30, 1912	3,000
Los Angeles	319,198	John H. Francis	4	Aug. —, 1910	Aug. 1, 1914	6,000
Marysville	5,430	W. P. Cramsie	4	Jan. 1, 1911	Jan. 1, 1915	1,800
Modesto	4,034	Richard H. Murtha[1]	1	May —, 1909	June 30, 1912	1,900
Monterey	4,923	George Schultzberg[1]	1	Aug. —, 1907	July 1, 1911	1,400
Napa	5,791	John L. Shearer[1]	1	Aug. —, 1879	June 1, 1912	1,680
Oakland	150,174	John William McClymonds.	4	Apr. —, 1889	Apr. 1, 1913	4,000
Ontario	4,274	Jefferson Taylor[1]	1	—— —, 1897	June 21, 1911	1,800
Palo Alto	4,486	Joseph C. Templeton	1	July 1, 1907	June 30, 1912	2,400
Pasadena	30,291	Jeremiah Milton Rhodes	4	July 31, 1911	May 31, 1915	5,000
Petaluma	5,880	Eldridge Bachman Dykes.[1]	1	June 1, 1908	June —, 1911	1,650
Pomona	10,207	William Roe Murphy	4	July 13, 1910	July 13, 1914	2,800

[1] Supervising principal.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
CALIFORNIA—con.						
Redlands	10,449	Charles Herbert Covell [1].	1	July 3, 1909	June 30, 1911	$3,000
Richmond	6,802	W. T. Helms				
Riverside	15,212	Arthur Newhall Wheelock.	1	June —, 1902	June 30, 1912	2,700
Sacramento	44,696	Oliver W. Erlewine	4		Dec. 31, 1914	2,700
San Bernardino	12,779	Francis W. Conrad	4	July 1, 1903	June 30, 1915	2,400
San Diego	39.578	Duncan MacKinnon	4	July 1, 1906	July 1, 1914	3,600
San Francisco	416,912	Alfred Roncovieri	4	Jan. — 1906	Jan. —, 1915	4,000
San Jose	28,946	Alexander Sheriffs	4	July 1, 1906	July 1, 1914	3,600
San Luis Obispo	5,157	Charles Reuben Small	4	July —, 1911	July —, 1915	2,400
San Mateo	4,384	George W. Hall [1]	1	July 1, 1902	June 30, 1911	2,400
San Rafael	5,934	Archibald Barron Anderson.	4	Feb. 1, 1910	July —, 1912	2,700
Santa Ana	8,429	John A. Cranston	4	July 1, 1906	July 1, 1914	3,000
Santa Barbara	11,659	Francis M. Fultz	4	Aug. 1, 1909	July 31, 1913	2,500
Santa Clara	4,348	William John Hayward [1]	2	July —, 1906	July 1, 1912	
Santa Cruz	11,146	John William Linscott	1	July 1, 1906	June 30, 1912	2,700
Santa Monica	7,847	Horace Michie Rebok	4	July 1, 1907	do	2,400
Santa Rosa	7,817	Thomas Fairchild Brownscombe. [1]	1	Aug. —, 1910	June 16, 1912	2,500
South Pasadena	4,649	George C. Bush [1]	1	Aug. —, 1905	July 1, 1912	2,400
Stockton	23,253	Ansel S. Williams				
Vallejo	11,340	A. M. Armstrong				
Visalia	4,550	C. J. Walker	4	May 1, 1911	May 1, 1915	2,400
Watsonville	4,446	Thomas Smith MacQuiddy. [1]	1	Apr. 1, 1907	June 30, 1911	2 200
Whittier	4,550	Milo Hunt [1]	1	Aug. —, 1910	July 31, 1911	1,500
COLORADO.						
Boulder	9,539	William V. Casey	1	—— —, 1894	June 1, 1912	2,500
Canon City	5,162	William H. Ray	1	May 2, 1911	do	1,700
Colorado City	4,333	E. F. Ewing	1	June 1, 1909	Sept. 1, 1912	2,000
Colorado Springs	29,078	Carlos Merton Cole	3	May 16, 1910	Aug. 31, 1913	3,500
Cripple Creek	6,206	Wilson M. Shafer	1	—— —, 1901	Sept. —, 1911	3,000
Denver	213,381	Charles Ernest Chadsey.	3	Sept. 1, 1907	Sept. 1, 1913	6,000
Durango	4,686	Emory Eldon Smiley	1	July 1, 1906	June 30, 1912	2,200
Fort Collins	8,210	N. S. Miller				
Grand Junction	7,754	John Henry Allen	3	June 4, 1904	June —, 1913	2,750
Greeley	8,179	Charles E. Carter				
La Junta	4,154	James Franklin Treasure	1	June —, 1911	July 1, 1912	2,200
Leadville	7,508	Frederick Pasqua Austin	1	May —, 1903	Aug. 31, 1911	2,400
Longmont	4,256	Rae H. Kiteley	2	Aug. —, 1905	June —, 1912	1,900
Pueblo:						
District No. 1.	44,395	Milton Chase Potter	5	Sept. —, 1908	June —, 1914	3,500
District No. 20		John Francis Keating	3	July 19, 1896	June 30, 1912	4,000
Salida	4,425	Edgar Kesner	1	Sept. —, 1898	do	1,700
Trinidad	10,204	Jesse Robert Morgan	2	Sept. —, 1910	Sept. —, 1912	2,000
CONNECTICUT.						
Ansonia	15,152	Frank M. Buckley	1	July 20, 1908	July 13, 1912	2,200
Branford	6,047	Herman S. Lovejoy [1]	1	Apr. —, 1903	June —, 1912	2,000
Bridgeport	102,054	Charles Winslow Deane.	3	May —, 1893	Aug. 20, 1912	3,900
Bristol	13,502	Newell Jennings	1	Feb. 1, 1908	July 14, 1912	1,200
Danbury	23,502	George Hussey Tracy	1	Aug. 1, 1906	Aug. 1, 1912	2,500
Derby	8,991	John W. Peck				
East Hartford	8,138	Thomas H. De Coudres.	1	July —, 1905	July 1, 1912	1,600
Enfield	9,719	[2]				
Glastonbury	4,796	Leon Alonzo Martin	1	—— —, 1909	June —, 1911	1,600
Greenwich	16,463	Edwin C. Andrews	1	July 19, 1910	July 15, 1912	3,000
Griswold	4,233	[2]				
Groton	6,495	[2]				
Hamden	5,850	Richard Thomas Tobin.	1	Mar. 24, 1909	June 10, 1912	1,000
Hartford	98,915	Thomas Snell Weaver	1	June —, 1901	June —, 1912	2,000
Huntington	6,545	Harry E. Fowler				
Killingly	6,564	Albert S. Ames	1	Nov. 15, 1910	July 1, 1912	1,400
Manchester	13,641	Alfred Francis Howes	1	June 23, 1910	July 15, 1912	1,700
Meriden	32,066	David Gibbs	1	July 31, 1911	June 21, 1911	3,000
Middletown	11,851	Wm. Alonzo Wheatley	1	Jan. 1, 1910	July 1, 1912	2,700
Milford	4,366	Herbert I. Mathewson	1	Jan. —, 1910	June —, 1912	1,800
Naugatuck	12,722	Frank Warren Eaton	1	Aug. —, 1900	July 1, 1912	2,500
New Britain	43,916	Stanley H. Holmes	1	Aug. —, 1906	Aug. —, 1912	3,400
New Haven	133,605	Frank Herbert Beede	5	—— —, 1900	Sept. 1, 1911	3,800
New London	19,659	Chas. Bulkeley Jennings.	1	May —, 1908	July 1, 1912	2,500
New Milford	5,010	John Pettibone	1	—— —, 1902		2,100
Norwalk	24,211	William E. Chancellor	[3]	Sept. —, 1908		2,500

[1] Supervising principal. [2] No superintendent. [3] Indefinite term.

II.—SUPERINTENDENTS IN CITIES AND TOWNS OF 4,000 POPULATION AND OVER—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
CONNECTICUT—continued.						
Norwich: Central district / West Chelsea district.	28,219	William D. Tillson / John Byron Stanton	1 / 1	Oct. —, 1909 / —— —, 1896	Aug. 31, 1911 / July —, 1911	$2,400 / 1,800
Plainfield	6,719	John L. Chapman	1	Aug. 1, 1905	Aug. 1, 1911	1,300
Plymouth	5,021	Andrew S. Gaylord	1	July 14, 1899	Oct. 14, 1912	700
Putnam	7,280	M. P. Dutton				
Rockville	7,977	Harry Brooks Marsh	1	Sept. —, 1906	June —, 1910	2,100
Seymour	4,786	Grover Chester Bowman	1	Mar. —, 1908	July 1, 1912	1,600
Shelton	4,807	Harry Ellsworth Fowler	1	May —, 1910	Aug. 15, 1911	2,000
Southington	6,516	William Charles Moore	(1)	Jan. —, 1910		2,200
South Manchester		Fred A. Verplanck	1	Aug. —, 1893	July 14, 1911	3,500
Stafford	5,233	(2)				
Stamford	28,836	Everett C. Willard	(1)	July 8, 1891		3,300
Stonington	9,154	William Henry Perry	1	July 15, 1910	July 15, 1912	2,250
Stratford	5,712	William B. Kelsey	1	Aug. 1, 1910	Aug. 1, 1911	2,000
Thompson	4,804	(2)				
Torrington	16,840	Edwin H. Forbes	1	Sept. —, 1886	June 24, 1910	3,750
Wallingford	11,155	Alfred B. Morrill	1	May —, 1910	Aug. 1, 1912	2,100
Waterbury	73,141	Berlin Wright Tinker	2	June —, 1897	—— —, 1913	3,800
West Hartford	4,808	William H. Hall				
West Haven	8,543	Edgar Crane Stiles [3]	1	Sept. —, 1898	July 1, 1911	3,100
Westport	4,259	E. J. Graham				
Willimantic	11,230					
Winchester	8,679	Frank E. Fisk	1	May —, 1911	July 14, 1912	2,000
Windsor	4,178	Daniel Howard	3	—— —, 1910	—— —, 1913	2,200
DELAWARE.						
Wilmington	87,411	George Wells Twitmyer	2	July —, 1900	June 30, 1911	2,500
DISTRICT OF COLUMBIA.						
Washington	331,069	Wm. Mehard Davidson	3	June —, 1911	June 30, 1914	5,000
FLORIDA.						
Gainesville	6,183	J. L. Kelley [4]				
Jacksonville	57,699	James Q. Palmer [4]	4	Dec. —, 1907	Jan. —, 1913	2,400
Key West	19,945	Virgil Scott Lowe [4]	4	Jan. 5, 1909	Jan. —, 1913	1,200
Lake City	5,032	John William Burns [4]	4	Jan. 1, 1909	Jan. 1, 1913	1,200
Miami	5,471	Robert Eric Hall [4]	4	Jan. 1, 1905	....do	1,500
Ocala	4,370	John Hunter Workman [5]	1	—— —, 1903	May —, 1912	1,400
Pennsacola	22,982	Nathan Burrel Cook [4]	4	Jan. —, 1885	Jan. 1, 1913	2,100
St. Augustine	5,494	W. S. M. Pinkham [4]				
St. Petersburg	4,127	John Milton Guilliams	2	June —, 1911	May —, 1913	2,250
Tallahassee	5,018	Edward B. Eppes [4]				
Tampa	37,782	Ludwig Wilhelm Buckholz. [4]	4	Jan. 5, 1909	Jan. —, 1913	2,400
West Tampa	8,258					
GEORGIA.						
Albany	8,190	Sidney R. De Jarnette	1		July 1, 1910	1,600
Americus	8,063	Augustus Griffin Miller	1	July 1, 1904	July 1, 1912	1,800
Athens	14,913	George Glenn Bond	3	—— —, 1891	June 30, 1914	2,300
Atlanta	154,839	William Martin Slaton	1	June 8, 1907	June 3, 1912	3,000
Augusta	41,040	Lawton Bryan Evans	1	Nov. 11, 1882	Jan. 1, 1912	3,000
Bainbridge	4,217	John Furman Thomason.	1	Apr. —, 1911	June 1, 1912	1,600
Brunswick	10,182	Nathaniel Harrison Ballard.	3	—— —, 1901	—— —, 1913	2,400
Cartersville	4,067	Henry L. Sewell	1	July 1, 1905	June 30, 1912	1,500
Columbus	20,554	Roland Bird Daniel	1	Nov. 1, 1909	....do	2,400
Cordele	5,883	Jason Scarboro	1	July 1, 1909	July 1, 1912	1,800
Dalton	5,324	Thomas Smith Lucas	1	July —, 1908	June 1, 1912	1,800
Dublin	5,795	Roland Edgar Brooks	1	June —, 1908	....do	1,700
Elberton	6,483	Philip Bird Winn	1	June —, 1909	June 30, 1912	1,800
Fitzgerald	5,795	Horace B. Ritchie				
Gainesville	5,925	James Austin Mershon	1	Mar. 1, 1910	May 20, 1912	1,650
Griffin	7,478	James Archibald Jones				
La Grange	5,587	Clifford Lewis Smith	1	June 1, 1903	May 31, 1912	1,700
Macon	40,665	Carleton B. Chapman	1	Aug. 1, 1904	Aug. 1, 1911	2,400
Marietta	5,949	William Thomas Dumas	1	Aug. 15, 1904	June 1, 1912	1,675
Milledgeville	4,385	William E. Reynolds	1	May —, 1896	May 28, 1912	1,500

[1] Indefinite term.
[2] No superintendent.
[3] For town of Orange.
[4] County superintendent.
[5] Principal of high school.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
GEORGIA—contd.						
Newnan	5,548	Charles K. Henderson, jr.	.....	.....	.....	.....
Rome	12,099	James Coffee Harris	1	Oct. 1,1892	June 1,1912	$2,000
Savannah	65,064	Otis Ashmore	1	July —,1896	July 1,1912	3,600
Thomasville	6,727	John Stephen Allen	1	May 1,1908	Sept. 1,1911	1,900
Valdosta	7,656	William Otis Roberts	1	Oct. —,1909	June —,1912	1,575
Waycross	14,485	Edwin Aldine Pound	1	Apr. —,1895	June 1,1912	2,520
IDAHO.						
Boise	17,358	Charles Simpson Meek	3	Aug. 1,1908	Aug. 1,1912	3,600
Coeur d'Alene	7,291	Charles Johnson	.....	.....	.....	.....
Idaho Falls	4,827	Benjamin Ray Crandall	2	Sept. 1,1907	Sept. 1,1913	2,500
Lewiston	6,043	Frank H. Huntworth	1	July 1,1910	July 1,1912	.....
Nampa	4,205	Frederick G. Kraege	1	May —,1909	June —,1912	2,050
Pocatello	9,110	Walter Raleigh Siders	2	Aug. 1,1899	May 31,1913	3,000
Twin Falls	5,258	Oliver Morton Elliott	1	July —,1909	July 1,1912	2,500
ILLINOIS.						
Alton	17,528	Robert Allen Haight	1	Jan. 1,1881	June 30,1912	2,700
Aurora:						
East side	29,807	Conrad Myron Bardwell.	1	July —,1896	July 1,1912	3,000
West side		Carleton Ellsworth Douglass.	1	Jan. —,1909	June —,1912	2,300
Batavia	4,436	Hugh Alvin Bone	1	May —,1909	June —,1912	2,200
Beardstown	6,107	Horace G. Russell	1	June —,1910	June 30,1912	1,800
Belleville	21,122	George H. Buseck	1	June —,1903	July 1,1912	2,100
Belvidere:						
North side	7,253	Eugene D. Merriman	1	Sept. —,1905	June —,1912	1,900
South side		C. H. LeVitt	.....	.....	.....	.....
Berwyn	5,841	Eugene Alonzo Wilson	1	Sept. —,1906	June 30,1912	2,200
Bloomington	25,768	John Kay Stableton	1	July 1,1901	.....do.....	.....
Blue Island	8,043	Jephtha Elmer Lemon	1	June —,1894	July 1,1912	3,600
Cairo	14,548	Taylor Clinton Clendenen	1	Sept. 1,1886	June 30,1912	2,400
Canton	10,453	George W. Gaylor	1	May —,1910	June —,1912	2,000
Carbondale	5,411	E. E. McLaughlin	1	—— —,1907	June —,1912	1,800
Centralia	9,680	Samuel Hallam Bohn	1	.....	June —,1911	1,800
Champaign	12,421	William Watson Earnest.	1	Mar. 1,1908	June 30,1912	2,500
Charleston	5,884	De Witt Elwood	1	Sept. —,1903	July 1,1912	2,000
Chicago	2,185,283	Ella Flagg Young	1	July 30,1909	Dec. 31,1911	10,000
Chicago Heights	14,525	Francis Martin Richardson.	1	Aug. 1,1901	Sept. 1,1912	2,500
Cicero	14,557	W. W. Lawton	1	Apr. 27,1908	June 26,1912	2,500
Clinton	5,165	Henry Hugh Edmunds	1	July 1,1907	June 30,1912	1,750
Collinsville	7,478	C. H. Dorris	.....	.....	.....	.....
Danville	27,871	Lin H. Griffith	1	July 31,1899	July 31,1912	2,700
Decatur	31,140	Harry Bruce Wilson	1	Aug. 13,1907	Sept. —,1911	3,300
De Kalb	8,102	Luther Augustus Hatch	1	July 1,1907	July 1,1911	2,000
Dixon:						
North side	7,216	H. V. Baldwin	1	—— —,1898	June —,1911	1,500
South side		W. R. Snyder	.....	.....	.....	.....
Duquoin	5,454	Charles William Houk	1	May —,1901	May 29,1911	1,800
East St. Louis	58,547	D. Walter Potts	1	May 1,1911	July 31,1912	2,700
Edwardsville	5,014	Heywood Coffield	1	June 1,1907	June 1,1911	1,650
Elgin	25,976	Robert I. White	1	July 1,1907	June 30,1912	2,900
Evanston:						
District No. 75	24,978	Homer Hitchcock Kingsley.	1	—— —,1886	.....do.....	4,000
District No. 76		Frederick William Nichols.	1	July 1,1885	.....do.....	3,600
Forest Park	6,594	Asa Paul Goddard	1	June —,1905	July —,1912	1,500
Freeport	17,567	Sigel Elza Raines	1	Jan. —,1904	July 1,1912	2,500
Galena	4,835	Edward Glenn Mason	1	.....	June 10,1911	1,200
Galesburg	22,089	William Lucas Steele	1	Aug. —,1885	June 30,1912	3,000
Granite City	9,903	Louis Philip Frohardt	1	Aug. —,1894	May 31,1912	2,100
Harrisburg	5,309	T. O. Elliott	.....	.....	.....	.....
Harvey	7,227	Frank Lester Miller	1	Sept. 1,1892	June 30,1912	2,000
Herrin	6,861	Perry Henry Hellyer	1	Sept. —,1910	June —,1912	1,275
Highland Park	4,209	Jesse Lowe Smith	1	June —,1901	June —,1912	2,400
Hoopeston	4,698	Samuel Kline McDowell	1	Feb. 1,1909	June 6,1912	2,000
Jacksonville	15,326	William Alexander Furr	1	July —,1905	June 1,1912	2,250
Jerseyville	4,113	Joshua Pike	1	—— —,1874	May 10,1912	1,800
Joliet	34,670	Edward F. Worst	1	July 1,1909	July 1,1912	3,750
Kankakee	13,986	Franklin N. Tracy	1	July —,1881	.....do.....	2,200
Kewanee	9,307	Robinson Godfrey Jones	1	Sept. —,1907	June 1,1912	3,000

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
ILLINOIS—contd.						
La Grange	5,282	Frank Elwood Sanford	1	Sept. —, 1890	June 30, 1912	$3,000
La Salle	11,537	James B. McManus	1	—— —, 1900	....do	1,800
Lincoln	10,892	Anthony Middleton	1	May —, 1908	....do	1,800
Litchfield	5,971	Alenor S. Anderson				
Macomb	5,774	T. M. Birney				
Madison	5,046	Louis Baer	1	May —, 1893	June 1, 1912	1,600
Marion	7,093	Eli Gilbert Leutz	1	May —, 1910	June —, 1912	1,650
Mattoon	11,456	Gilbert P. Randle	1	—— —, 1902	June 30, 1912	2,400
Maywood	8,033	John Porter Adams	1	—— —, 1895	....do	2,500
Melrose Park	4,806	[1]				
Metropolis	4,655	Marcus N. McCartney	1	Apr. —, 1910	....do	1,200
Moline	24,199	Charles Henry Maxson	1	Jan. 24, 1911	....do	2,750
Monmouth	9,128	Chas. Ellsworth Joiner	1	July 1, 1909	July 1, 1912	2,000
Morris	4,563	Edwin D. Martin	1	Sept. 5, 1910	June —, 1912	1,800
Mount Carmel	6,934	Walter Stewart Booth	1	May —, 1899	May 31, 1911	1,800
Mount Vernon	8,007	William Miner	1	Sept. —, 1907	May 31, 1912	1,600
Murphysboro	7,485	Samuel J. Shomaker	1	Apr. 27, 1910	May 10, 1912	1,250
Normal	4,024	Exum Woodard Davis	1	Mar. —, 1908	June 1, 1912	1,700
Oak Park	19,444	William H. Hatch	1	Apr. —, 1892	July 1, 1912	4,200
Olney	5,011	Henry W. Hostetler	1	May —, 1911	June 1, 1912	1,350
Ottawa	9,535	Christopher Jos. Byrne	1	July 11, 1905	June 30, 1912	2,000
Pana	6,055	George B. Coffman	1	June —, 1908	June —, 1911	1,600
Paris	7,664	Edwin B. Brooks	1	July —, 1905	June 1, 1912	2,100
Pekin	9,897	James J. Crosby	1	June —, 1904	June 15, 1912	1,900
Peoria	66,950	Gerard T. Smith	1	Aug. 1, 1906	July 1, 1912	3,500
Peru	7,984	James Robert Hart	1	June —, 1907	June —, 1911	1,700
Pontiac	6,090	Arthur Verner	1	Feb. —, 1909	June —, 1912	2,500
Princeton	4,131	Harmon Ebert Waits	1	June 15, 1910	June 7, 1912	1,700
Quincy	36,587	Edward G. Bauman	1	July 1, 1910	July 1, 1912	2,500
Rockford	45,401	Peleg Remington Walker	1	July —, 1884	June 30, 1911	2,500
Rock Island	24,335	Herbert B. Hayden	1	July 20, 1900	July 31, 1912	2,600
St. Charles	4,046	Mary Faith McAuley	1	May —, 1911	June —, 1912	1,600
Springfield	51,678	Joseph H. Collins	1	June 1, 1888	June 30, 1912	3,000
Spring Valley	7,035	Jas. Henry Browning	1	Sept. 1, 1909	June 1, 1911	1,400
Staunton	5,048	Wm. Edmund Eccles	1	Sept. —, 1906	May 24, 1912	1,200
Sterling:						
District No. 8.	7,467	Miss Annie Laurie Hill	1	Nov. —, 1903	June —, 1911	1,400
District No. 11.		Henry L. Chaplin	1	—— —, 1894	June —, 1912	1,600
Streator	14,253	James Gregory Moore	1	July 1, 1911	July 1, 1911	2,000
Taylorville:						
East side	5,446	Edgar S. Jones	1	Sept. —, 1910	June 1, 1912	
West side		Prentice Hoover Deffendall.	1	May —, 1909	May —, 1912	1,170
Urbana	8,245	Ananias P. Johnson	1	Aug. 1, 1906	July 31, 1912	2,250
Virden	4,000	Perley Milton Silloway	1	Sept. 1, 1909	June 5, 1911	1,300
Waukegan	16,069	Oliver Scott Thompson	1	June —, 1911	June —, 1912	1,800
West Hammond	4,948	A. G. Deaver				
Wilmette	4,943	James Robb Harper	1	Oct. 9, 1908	June 14, 1912	2,100
Woodstock	4,331	Edwd. Charles Thomas	1	Jan. 1, 1909	June —, 1912	1,700
Zion City	4,789	Benjamin G. Hess	1	Aug. —, 1908	May —, 1912	1,000
INDIANA.						
Alexandria	5,096	Arthur L. Trester	1	Nov. 1, 1909	June 1, 1912	1,500
Anderson	22,476	James Buchanan Peary	1	June —, 1905	July 31, 1911	2,700
Aurora	4,410	Joseph Russell Houston	1	May —, 1911	June —, 1912	1,500
Bedford	8,716	Joseph Benjamin Fagan	1	June —, 1906	Aug. 1, 1912	2,000
Bloomington	8,838	Henry Lester Smith	3	Aug. 1, 1909	Aug. 1, 1913	2,600
Bluffton	4,987	Philemon A. Allen	2	Sept. —, 1881	June 30, 1913	1,800
Brazil	9,340	Chas. Clifford Coleman	3	May 31, 1907	June 15, 1914	2,300
Clinton	6,229	Edison E. Oberholtzer	2	May 27, 1911	Aug. 1, 1913	1,700
Columbus	8,813	Thomas F. Fitzgibbon	3	July 31, 1901	July 31, 1913	2,100
Connersville	7,738	Guy Mitchell Wilson	1	July 1, 1908	July 1, 1912	2,000
Crawfordsville	9,371	Linnaeus Neal Hines	3	....do	....do	2,300
Decatur	4,471	Elmer Ellsworth Rice	1	Aug. 15, 1909	Aug. 15, 1911	1,500
East Chicago	19,098	Edwin Nelson Canine	1	Aug. 1, 1905	Aug. 1, 1912	2,500
Elkhart	19,282	Ellis Herbert Drake	3	Apr. 16, 1906	June 30, 1914	2,400
Elwood	11,028	J. L. Clauser				
Evansville	69,647	James Harvey Tomlin	1	Mar. 28, 1910	Aug. 1, 1911	3,600
Fort Wayne	63,933	Justin N. Study	3	—— —, 1896	July 1, 1912	3,600
Frankfort	8,634	Oscar Morton Pittinger	1	Nov. —, 1909	....do	2,000
Franklin	4,502	Paul Van Riper	1	June —, 1910	Sept. 12, 1911	1,800
Garrett	4,149	Francis M. Merica	3	June —, 1905	Aug. 1, 1913	1,500
Gary	16,802	William A. Wirt	1	Oct. —, 1906	June 30, 1912	3,600
Goshen	8,514	Edgar N. Mendenhall	1	July —, 1911	Aug. 1, 1912	1,800
Greenfield	4,448	Frank Larrabee				
Greensburg	5,420	Elmer C. Jerman	1	June —, 1903	July 1, 1912	1,800

[1] See Maywood.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
INDIANA—contd.						
Hammond	20,925	Charles May McDaniel				
Hartford City	6,187	William A. Myers	1	Mar. —,1908	July 31,1911	$1,700
Huntington	10,272	Jesse Melvin Scudder	1	June 15,1911	Sept. 1,1912	1,800
Indianapolis	233,650	George A. Mirick [1]		Sept. 1,1911		
Jeffersonville	10,412	Claytis McHenry Marble	3	Feb. 22,1904	Aug. 1,1911	1,800
Kendallville	4,981	P. C. Emmons	3	Aug. 1,1910	Aug. 1,1914	1,800
Kokomo	17,010	Alva Otis Neal	2	—— —,1910	—— —,1913	2,400
Lafayette	20,081	Robert Foster Hight	1	Aug. 1,1904	Aug. 1,1912	2,500
Laporte	10,525	Arthur Deamer	1	Aug. —,1909	Aug. —,1911	2,400
Lebanon	5,474	Henry Grant Brown	1	Apr. 1,1905	June 1,1912	2,000
Linton	5,906	Joseph Henry Haseman	1	Apr. —,1905	July 31,1911	1,500
Logansport	19,050	Albert H. Douglass	1	Aug. 1,1891	Aug. 1,1912	2,400
Madison	6,934	Donald Du Shane	1	July 15,1911	June 15,1912	1,400
Marion	19,359	Joe T. Giles	2	Aug. 1,1908	Aug. 1,1912	2,500
Martinsville	4,529	Jeremiah E. Robinson	1	June —,1901	....do	1,665
Michigan City	19,027	Louis Ward Keeler	2	Sept. 1,1904	Sept. 1,1912	2,500
Mishawaka	11,886	John F. Nuner	1	Aug. —,1903	Aug. 1,1912	2,000
Mount Vernon	5,563	Edgar Julius Llewelyn	1	Apr. 27,1911	June 30,1912	1,700
Muncie	24,005	Benjamin F. Moore	1	Aug. 1,1908	Aug. 1,1911	3,000
New Albany	20,629	Harry A. Buerk	2	Sept. 1,1908	June 1,1913	2,400
New Castle	9,446	Elmer W. Lawrence	3	May —,1910	May —,1912	2,000
Noblesville	5,073	Emmet C. Stopher	2	Aug. 1,1909	July 31,1913	1,500
Peru	10,910	Edwd. Everett Hostetler	1	July 1,1908	July 1,1912	1,800
Portland	5,130	Grant E. Derbyshire	1	Dec. —,1905	Aug. 1,1912	1,750
Princeton	6,448	James W. Stott	1	June 30,1911	July 1,1912	1,800
Richmond	22,324	Thomas Abbott Mott	1	Aug. 1,1896	Aug. 1,1912	2,500
Rushville	4,925	Joseph Hiram Sholl	1	June —,1904	....do	1,600
Seymour	6,305	John A. Linke	1	July —,1909	June 1,1911	1,500
Shelbyville	9,500	Samuel C. Ferrell				
South Bend	53,684	John Anderson Wood	1	Aug. —,1909	Aug. 1,1912	3,500
Sullivan	4,115	Jacob W. Holton	3	June 1,1906	June 1,1914	[2] 1,800
Terre Haute	58,157	Charles J. Waits	2	Dec. 12,1910	July 31,1912	3,000
Tipton	4,075	Charles F. Patterson				
Valparaiso	6,987	Arthur Abram Hughart				
Vincennes	14,895	Robert Ila Hamilton	1	Mar. —,1904	June 30,1911	2,400
Wabash	8,687	Orville Clyde Pratt	3	—— —,1911	—— —,1914	2,000
Warsaw	4,430	Horatio Seymour Kaufman.	1	Aug. —,1908	Sept. 1,1912	1,500
Washington	7,854	William Francis Axtell	1	—— —,1894	June —,1912	2,000
Whiting	6,587	Winfred Wamsley Holliday.	1	Dec. 15,1910	July 1,1912	2,220
Winchester	4,266	Oscar R. Baker	1	—— —,1895	Sept. 1,1912	1,600
IOWA.						
Albia	4,969	Frank Thomas Vasey	1	Sept. 1,1910	May 25,1911	1,600
Ames	4,223	Frank Walter Hicks	1	May —,1910	July —,1912	1,800
Atlantic	4,560	Charles Emory Blodgett	1	Sept. —,1907	Sept. —,1912	1,700
Boone	10,347	Ernest Cary Meredith	1	Apr. —,1910	July —,1912	2,000
Burlington	24,324	Whittier Lorenz Hanson	1	July 15,1909	Aug. 1,1912	2,400
Cedar Falls	5,012	Bruce Francis	1	Sept. —,1909	June —,1912	2,000
Cedar Rapids	32,811	Joseph Jasper McConnell	1	Aug. 1,1901	July 31,1912	3,000
Centerville	6,936	C. J. Johnson	3	—— —,1908	—— —,1912	1,800
Charles City	5,892	Edwin T. Armstrong				
Cherokee	4,884	L. H. Maus	1	—— —,1906	June 1,1911	
Clinton	25,577	Ozro P. Bostwick				
Council Bluffs	29,292	John Harry Beveridge	1	Aug. 1,1908	Aug. 31,1912	2,800
Creston	6,924	Adam Pickett	1	July 1,1907	June 1,1912	1,800
Davenport	43,028	Frank Leroy Smart	1	July —,1907	June 30,1912	3,600
Des Moines	86,368	William Otis Riddell	1	Oct. —,1904	July 1,1912	5,000
Dubuque	38,494	James Hugh Harris	1	May 1,1910	July 1,1911	3,200
Fairfield	4,970	Otis Preston Flower	1	June —,1910	June 1,1912	1,700
Fort Dodge	15,543	Lewis H. Minkel	1	Apr. —,1911	June —,1912	2,100
Fort Madison	8,900	E. F. Schall	1	—— —,1909	—— —,1911	1,800
Glenwood	4,052	James Hamilton Morgan	1	Aug. —,1908	May 26,1912	1,500
Grinnell	5,036	Eugene Henely	1	June —,1905	Sept. —,1911	1,850
Iowa City	10,091	H. E. Blackmar	1	May —,1907	July 1,1912	2,000
Keokuk	14,008	William Aldrich	1	Mar. —,1904	June 30,1911	2,000
Le Mars	4,157	Francis Eber Palmer	1	Sept. —,1908	June —,1910	2,000
Marion	4,400	F. L. Mahannah	1	Sept. —,1909	June 1,1912	1,600
Marshalltown	13,374	Aaron Palmer	3	Jan. 1,1907	July 1,1913	2,300
Mason City	11,230	Hugh Mack Gilmore	1	Apr. —,1910	June 1,1912	2,200
Muscatine	16,178	T. W. B. Everhart	1	July 1,1910	July 1,1912	2,000
Newton	4,616	E. J. H. Beard	1	Sept. —,1892	Sept. —,1912	1,600
Oelwein	6,028	Orris Watson Herr	1	Sept. —,1906	June —,1912	1,700

[1] Acting superintendent.

[2] Salary increases $100 each year until $2,000 is reached.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
IOWA—continued.						
Oskaloosa	9,466	Frank Whittier Else	1	May —, 1905	June 30, 1911	$2,000
Ottumwa	22,012	Albion Wesley Stuart	1	June —, 1876	June —, 1912	2,400
Perry	4,630	Alfred Williams	1	Sept. —, 1910	June 3, 1912	1,500
Red Oak	4,830	W. F. Cramer	2	Sept. —, 1906	June —, 1912	1,900
Shenandoah	4,976	Herbert Edwin Wheeler	1	—— —, 1903	—— —, 1912	1,800
Sioux City	47,828	M. G. Clark	1	July 1, 1911	July 1, 1912	3,000
Washington	4,380	A. C. Fuller, jr	1	June —, 1909	Sept. 1, 1912	1,700
Waterloo: East side / West side	26,693	Addison W. Chamberlin	1	June 1, 1908	June 30, 1912	2,700
		Anson Theodore Hukill	1	May 30, 1898	June 1, 1911	2,200
Webster City	5,208	D. M. Kelley				
KANSAS.						
Abilene	4,118	William Arthur Stacey	1	Jan. 1, 1906	Aug. 1, 1912	1,700
Arkansas City	7,508	John Frederick Bender	1	Aug. 1, 1907	July 31, 1912	1,650
Atchison	16,429	Nathan Thomas Veatch				1,800
Chanute	9,272	John Francis Hughes	1	May —, 1911	July 1, 1912	1,700
Cherryvale	4,304	Nathaniel A. Baker	1	July 1, 1910	do	1,500
Coffeyville	12,687	William M. Sinclair	1	Aug. —, 1889	Aug. —, 1912	2,400
Concordia	4,415	Clydus C. Brown	1	Sept. 1, 1910	Aug. 1, 1912	1,710
Emporia	9,058	Lloyd A. Lowther	2	Nov. —, 1896	June 30, 1913	2,000
Fort Scott	10,463	Homer Davis Ramsey	1	June 1, 1911	Aug. 1, 1912	1,800
Galena	6,096	Lemuel A. Guthridge	2	June 1, 1910	June 1, 1913	1,500
Great Bend	4,622	Andrew F. Senter	1	Aug. 1, 1910	Aug. 1, 1912	1,800
Hutchinson	16,364	Justus Otho Hall	1	Sept. 1, 1909	July 31, 1912	2,200
Independence	10,480	Charles Sumner Risdon	2	—— —, 1902	July 31, 1913	3,000
Iola	9,032	Lawrence W. Mayberry	1	July 1, 1907	Aug. 1, 1912	2,100
Junction City	5,598	Wm. Samuel Heusner	2	May —, 1900	do	2,000
Kansas City	82,331	Matthew Edgar Pearson	1	July 1, 1902	do	3,300
Lawrence	12,374	Franklin Pierce Smith	2	Nov. —, 1894	Aug. 1, 1913	2,250
Leavenworth	19,363	Marcus Egbert Moore	2	Aug. 12, 1911	Aug. 12, 1913	2,400
Manhattan	5,722	John E. Edgerton	1	July 1, 1900	July 1, 1912	1,600
Newton	7,862	Lathrop James Hall	1	July 30, 1908	Aug. 1, 1912	1,950
Osawatomie	4,046	Floyd Brown Lee	1	—— —, 1907	June —, 1912	1,300
Ottawa	7,650	Arch Lyndon Bell	1	July 1, 1904	July 1, 1912	1,800
Parsons	12,463	Frank L. Pinet	2	June —, 1910	Aug. 1, 1913	2,000
Pittsburg	14,755	Allen Hopkins Bushey	1	May —, 1903	May —, 1912	
Rosedale	5,960	George E. Rose	1	June —, 1904	June —, 1911	1,600
Salina	9,688	John Lofty				
Topeka	43,684	C. C. Starr				
Wellington	7,034	Edmond G. Kelley	1	May 24, 1909	Aug. 1, 1911	1,500
Wichita	52,450	George W. Kendrick				
Winfield	6,700	John Wesley Spindler	1	Aug. 1, 1891	Aug. 1, 1912	1,800
KENTUCKY.						
Ashland	8,688	Benjamin F. Stanton	4	Apr. —, 1909	Aug. 31, 1914	2,400
Bellevue	6,683	W. P. King	2	Aug. —, 1909	June 30, 1913	1,800
Bowling Green	9,173	Thomas Crittendon Cherry.	1	June 1, 1910	July 1, 1912	1,980
Covington	53,270	Homer Oscar Sluss	4	Apr. —, 1907	Aug. 1, 1915	3,000
Danville	5,420	Oscar B. Fallis	1	—— —, 1907	May 26, 1911	1,200
Dayton	6,979	Ellen Taylor	1	Sept. —, 1911	June 7, 1912	1,350
Frankfort	10,465	Hugh C. McKee	1	July 1, 1904	June 30, 1912	1,800
Georgetown	4,533	Jesse Crawford Waller	1	June —, 1910	June —, 1912	1 200
Henderson	11,452	James W. Welch	1	June —, 1909	June 30, 1911	2,000
Hopkinsville	9,419	Barksdale Hamlett				
Lexington	35,099	Massillon Alexander Cassidy.	4	—— —, 1886	—— —, 1911	2,400
Louisville	223,928	Ernest O. Holland	1	Jan. —, 1911	Jan. —, 1912	5,000
Ludlow	4,163	Welby D. Reynolds	2	June —, 1910	June —, 1913	1,350
Madisonville	4,966	Ralph B. Rubins	1	—— —, 1906	May —, 1912	1,500
Mayfield	5,916	Alonzo Carroll Burton	1	May 1, 1908	May 1, 1912	1,800
Maysville	6,141	James Wood Bradner	3	Sept. —, 1909	June —, 1912	1,700
Middlesboro	7,305	M. Oliver Winfrey				2,000
Newport	30,309	Charles G. Hammond	1	May 2, 1910	June 30, 1912	2,160
Owensboro	16,011	James H. Risley	1	July 1, 1911	July 1, 1912	2,100
Paducah	22,760	John Albert Carnagay	4	Mar. 1, 1907	July 31, 1914	2,500
Paris	5,859	George W. Chapman	4	July 1, 1906	June 30, 1914	1,800
Richmond	5,340	D. W. Bridges				
Somerset	4,491	J. P. W. Brouse				
Winchester	7,156	Edward F. Darnaby	1	July —, 1911	June —, 1912	1,600
LOUISIANA.						
Alexandria	11,213	D. B. Showalter[1]				
Baton Rouge	14,897	H. K. Strickland				

[1] Parish superintendent.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
LOUISIANA—con.						
Crowley	5,099	J. H. Lewis [1]				
Donaldsonville	4,090	John Louis Rusca [1]	4	Nov. 16, 1909	July —, 1912	$1,800
Houma	5,024	Wm. Pleasant Tucker [1]	4	Nov. —, 1904	Nov. —, 1912	1,100
La Fayette	6,392	Elmo L. Wright [1]	4	July 2, 1909	July —, 1913	1,800
Lake Charles	11,449	John McNeece [1]				
Monroe	10,209	Ernest Long Neville	1	May 28, 1910	—— —, 1912	2,000
Morgan City	5,477	Charles E. Carnes [2]	1	July 15, 1911	May 20, 1912	1,500
New Iberia	7,499	Ralph W. Frame [1]	4	—— —, 1909	July —, 1913	1,750
New Orleans	339,075	Joseph Marr Gwinn	4	Nov. 16, 1910	Aug. 31, 1912	4,000
Opelousas	4,623	Charles Jackson Thompson. [1]	4	Aug. 25, 1904	July —, 1913	2,000
Plaquemine	4,955	Errett Allen [2]	1	Aug. —, 1910	May 18, 1912	1,125
Shreveport	28,015	C. E. Byrd. [1]	4		Nov. —, 1912	3,500
MAINE.						
Auburn	15,064	Henry Herbert Randall.	1	July 1, 1907	July 31, 1912	2,100
Augusta	13,211	Farnsworth Gross Marshall.	1	Aug. 1, 1910	Aug. —, 1912	2,000
Bangor	24,803	Charles E. Tilton	1	Aug. 14, 1900	July 11, 1912	1,800
Bath	9,396	Frederick W. Freeman	1	Aug. —, 1904	Aug. —, 1912	1,500
Belfast	4,618	Alonzo Jesse Knowlton	1	July 3, 1906	July 1, 1912	1,500
Biddeford	17,079	Harold W. Files				
Brewer	5,667	Charles Norman Perkins.	1	Mar. 13, 1909	Mar. 17, 1912	1,600
Brunswick	6,621	John Albert Cone	1	Aug. 1, 1909	Aug. 1, 1912	1,800
Calais	6,116	James Madison Pike	1	Apr. —, 1909	Apr. —, 1912	1,400
Eastport	4,961	Fred Benson	1	July —, 1908	July 1, 1912	1,250
Fairfield	4,435	Will Osmer Hersey	1	July —, 1908	Apr. 1, 1912	1,400
Gardiner	5,311	Charles O. Turner	3	July 1, 1907	July 1, 1913	1,300
Houlton	5,845	William Frederick Coan.	1	Apr. 3, 1909	Apr. 1, 1911	1,800
Lewiston	26,247	D. J. Callahan	1		July 31, 1911	2,000
Old Town	6,317	Daniel Lyman Wormwood.	1	Apr. 4, 1905	Apr. 15, 1912	1,750
Portland	58,571	De Forest Henry Perkins.	1	Aug. 1, 1911	Aug. 1, 1912	2,200
Presque Isle	5,179	Myrtle L. T. White	1	July —, 1897	Mar. —, 1912	600
Rockland	8,174	Giles Alfred Stuart	1	Aug. —, 1909	Mar. —, 1912	2,000
Rumford	6,777	W. H. S. Ellingwood	1	May —, 1910	May 1, 1912	1,800
Saco	6,583	Theodore Tripp Young	1	Sept. 1, 1909	Sept. 1, 1911	1,100
Sanford	9,049	Isaac A. Smith	1	Apr. 1, 1911	Apr. 1, 1912	1,500
Skowhegan	5,341	Leon Washington Gerrish.	1	Aug. 1, 1911	June 30, 1912	1,600
South Portland	7,471	James Otis Kaler	1	Mar. —, 1898	Mar. —, 1912	1,000
Waterville	11,458	Herbert Carlyle Libby				
Westbrook	8,281	Prescott Keyes	1	July 1, 1908	July 1, 1911	2,000
MARYLAND.						
Annapolis	8,609	Samuel Garner [3]	2	Sept. 1, 1908	May 1, 1912	1,500
Baltimore	558,485	Francis Albert Soper	(4)	Aug. 1, 1911		5,000
Cambridge	6,407	William P. Beckwith [3]	1			
Cumberland	21,829	Archibald Carlyle Williamson.	2	Feb. —, 1905	July 31, 1912	3,000
Frederick	10,411	John T. White [3]				
Frostburg	6,028	Olin Robson Rice [2]	(4)	July —, 1904		1,500
Hagerstown	16,507	William Merrick Huyett. [3]		Aug. 15, 1911		1,500
Havre de Grace	4,212	Charles T. Wright [3]				
Salisbury	6,690	William James Holloway. [3]	2	July —, 1908	July 31, 1912	1,400
MASSACHUSETTS.						
Abington	5,455	John E. De Meyer	1	Sept. 1, 1909	Aug. 1, 1912	2,200
Adams	13,026	Francis Asbury Bagnall.	1	Aug. —, 1901	Aug. —, 1911	2,500
Amesbury	9,894	Charles Everett Fish	1	Aug. 1, 1906	Aug. 1, 1912	2,000
Amherst	5,112	Audubon Levi Hardy	1	Sept. 1, 1898	Sept. 1, 1912	2,050
Andover	7,301	G. M. Bemis				
Arlington	11,187	John Francis Scully	1	Oct. —, 1905	June 30, 1912	2,600
Athol	8,536	Winfield Scott Ward	1	Apr. —, 1897	Sept. 1, 1912	2,000
Attleboro	16,215	Lewis Adams Fales	1	Aug. —, 1905	Aug. —, 1912	2,200
Barnstable	4,676	George Homer Galger				
Belmont	5,542	George Peters Armstrong.	3	Apr. —, 1897	July 1, 1913	2,650
Beverly	18,650	Robert Orange Small	1	Sept —, 1910	Sept. 1, 1912	2,400
Blackstone	5,648	Joseph P. McCooey				
Boston	670,585	Stratton D. Brooks	6	Mar. 21, 1906	Sept. 1, 1912	6,000

[1] Parish superintendent.
[2] Principal.
[3] County superintendent.
[4] Indefinite term.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
MASSACHUSETTS—continued.						
Braintree	8,066	Ralph Libby Wiggin	1	Oct. 1,1909	Oct. —,1911	$1,800
Bridgewater	7,688	(See Abington)				
Brockton	56,878	George Louis Farley	1	Aug. —,1910	Aug. —,1911	3,000
Brookline	27,792	George I. Aldrich				
Cambridge	104,839	Frank Edson Parlin	1	Sept. 1,1909	Sept. 1,1911	4,000
Canton	4,797	John C. Davis				
Chelmsford	5,010	Benjamin Elbridge Martin.	1	Aug. 1,1910	July 31,1912	1,500
Chelsea	32,452	Albert Leon Safford	1	Sept. 1,1910	Sept. 1,1912	2,500
Chicopee	25,401	John Cameron Gray	1	Sept. 1,1901	June 30,1912	2,600
Clinton	13,075	Charles Lorain Hunt	1	June —,1889	....do	2,100
Concord	6,421	Wells Albert Hall	1	Sept. —,1907	Sept. —,1911	2,300
Danvers	9,407	Henry Coburn Sanborn	1	June —,1907	July 1,1912	2,000
Dartmouth	4,378	Albert S. Cole	1	Sept. —,1906	Sept. —,1911	1,700
Dedham	9,284	Roderick Whittelsey Hine.	1	Aug. —,1893	July 1,1911	2,200
Dudley	4,267	Ernest W. Robinson				
Easthampton	8,524	William Dana Miller	1	Apr. 1,1896	June 30,1912	1,800
Easton	5,139	Philip Wescott Lawrence Cox.	1	June 16,1911	July 1,1912	1,600
Everett	33,484	Fairfield Whitney	1	Aug. —,1910	July —,1912	2,500
Fairhaven	5,122	Frank M. Marsh				
Fall River	119,295	Everett Brownell Durfee.	1	July 18,1905	Aug. 31,1912	3,000
Fitchburg	37,826	Joseph Gardner Edgerly	1	Sept. 27,1875	July 31,1911	2,850
Framingham	12,948	Samuel F. Blodgett	1	—— —,1896	Sept. 1,1912	2,200
Franklin	5,641	Jacob H. Carfrey	3	Aug. 1,1911	—— —,1914	1,800
Gardner	14,699	Frederick S. Pope	1	Sept. 1,1911	—— —,1912	2,000
Gloucester	24,398	Freeman Putney	1	Mar. —,1888	June —,1912	2,300
Grafton	5,705	Charles F. Prior	1	Oct. 1,1911	July 1,1912	1,800
Great Barrington	5,926	J. Francis Allison	1	—— —,1897	Aug. 31,1911	1,800
Greenfield	10,427	Herbert Eliot Richardson.	1	July 1,1906	June 30,1912	2,000
Haverhill	44,115	Christie A. Record	1	Sept. —,1909	Aug. 31,1911	2,600
Hingham	4,965	Nelson George Howard	1	Aug. —,1898	Mar. —,1912	2,500
Holyoke	57,730	John Lawrence Riley	3	Apr. 5,1909	Aug. 1,1912	3,000
Hudson	6,743	Cassius Samuel Lyman	3	Sept. 1,1906	Sept. 1,1912	2,000
Hyde Park	15,507	Horace L. Brittain	1	Sept. 1,1907	Sept. 1,1911	2,500
Ipswich	5,777	John Piper Marston	1	July 1,1909	July 1,1912	2,400
Lawrence	85,892	Bernard M. Sheridan				
Lee	4,106	Bion Eugene Hicks	3	Sept. 1,1909	June 30,1911	1,500
Leominster	17,580	Thomas E. Thompson	1	July 1,1895	June 30,1912	2,200
Lexington	4,918	Frank Hardy Damon	1	—— —,1908	June —,1911	2,500
Lowell	106,294	Arthur K. Whitcomb	1	Sept. 1,1891	Sept. 1,1911	3,000
Ludlow	4,948	Walter E. Gushee	1	—— —,1903	June 30,1912	1,700
Lynn	89,336	Frank J. Peaslee	(1)	Sept. 1,1901		3,000
Malden	44,404	Clarence H. Dempsey	1	Sept. 1,1910	Sept. 1,1912	2,700
Mansfield	5,183	Edward Payson Fitts	1	Apr. 9,1891	Apr. 9,1912	1,800
Marblehead	7,338	Clarence F. Carroll				
Marlboro	14,579	Orion Albion Morton	1	Feb. —,1906	Sept. 1,1912	2,100
Maynard	6,390	Francis S. Brick				
Medford	23,150	Fred Herbert Nickerson	1	July —,1909	Aug. 1,1911	3,000
Melrose	15,715	John Clinton Anthony	1	Aug. —,1909	Sept. —,1912	2,400
Methuen	11,448	Harvey Snider Gruver	1	July 1,1910	July 1,1912	2,000
Middleboro	8,214	Charles Henry Bates	1	Oct. —1,1910	Aug. 1,1912	2,200
Milford	13,055	Almarin Orton Caswell	1	Aug. —,1911	Sept. 1,1912	1,750
Millbury	4,740	Ira T. Chapman	1	Aug. 1,1907	Aug. 1,1912	2,200
Milton	7,924	Asher Johnson Jacoby	1	Sept. —,1901	Sept. —,1911	3,000
Monson	4,758	Fredk. Albert Wheeler	1	Aug. —,1902	July 1,1912	1,800
Montague	6,856	Frank Prosper Davison	1	Feb. —,1902	June 30,1912	1,800
Natick	9,866	John D. Brooks	1	Sept. —,1909	July 1,1912	2,000
Needham	5,026	Austin Hubert Keyes	1	July 1,1911	....do	2,200
New Bedford	96,652	Allen Phelps Keith	3	June 3,1908	July 1,1914	4,000
Newburyport	14,949	Edgar L. Willard				
Newton	39,806	Frank E. Spaulding	1	Sept. 1,1904	Aug. 31,1911	5,000
North Adams	22,019	Isaac Freeman Hall	1	Sept. 1,1895	Sept. 1,1912	2,500
Northampton	19,431	Fayette Kingsley Congdon.	1	Aug. 1,1905	July 31,1911	2,200
North Andover	5,529	D. P. Daine				
North Attleboro	9,562	Robert Jaquith Fuller	1	Sept. —,1906	Sept. —,1911	2,075
Northbridge	8,807	Saml. Appleton Melcher	1	Mar. —,1884	Apr. —,1912	2,350
Norwood	8,014	Austin H. Fitts	1	May —,1899	Aug. 1,1912	2,100
Orange	5,282	Edward Dixon	1	Sept. 1,1901	July 1,1911	1,700
Palmer	8,610	Clifton Henry Hobson	1	May 26,1911	Feb. 1,1912	1,700
Peabody	15,721	Albert Robinson	1	Sept. —,1903	Sept. 1,1911	2,000
Pittsfield	32,121	Clair G. Persons	1	Aug. 1,1910	Aug. 1,1911	2,500

[1] Indefinite term.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
MASSACHUSETTS—continued.						
Plymouth	12,141	Francis J. Heavens	(1)	Apr. —,1895		$2,000
Provincetown	4,369	Frank Merritt Rich	1	Apr. 1,1910	Sept. 1,1912	1,600
Quincy	32,642	Albert L. Barbour	1	July 31,1909	Jan. 1,1912	3,000
Randolph	4,301	F. T. Reynolds				
Reading	5,818	Harry Thornton Watkins.	1	Sept. —,1909	Sept. —,1911	3,000
Revere	18,219	Herbert Francis Taylor	1	Sept. —,1910	Sept. —,1912	2,400
Rockland	6,928	William Leslie Coggins	1	May 12,1905	Sept. 1,1911	1,500
Rockport	4,211	Wm. Francis Eldredge	1	Sept. —,1905	June 30,1912	1,400
Salem	43,697	John W. Perkins	1	Sept. 1,1894	Sept. 1,1912	2,500
Saugus	8,047	William Fisher Sims	1	Aug. —,1910	.....do	1,800
Somerville	77,236	Charles Shedd Clark	1	June —,1908	Sept. —,1912	3,500
Southbridge	12,592	Fred E. Corbin	1	—— —,1902	Sept. —,1912	2,250
South Hadley	4,894	Frederick Ellsworth Whittemore.	1	Apr. —,1904	Apr. —,1912	1,750
Spencer	6,740	Charles F. Adams	1	Aug. —,1903	Apr. —,1911	1,600
Springfield	88,926	James H. Van Sickle	1	Sept. 1,1911	Aug. 31,1912	5,000
Stoneham	7,090	Arthur Balcom Webber	3	May 1,1910	Sept. —,1914	2,000
Stoughton	6,316	Edward P. Fitts	1	—— —,1891	Apr. 9,1911	1,500
Swampscott	6,204	Thomas Benjamin Ford	(1)	Aug. 28,1910		1,000
Taunton	34,259	Henry W. Harrub	1	Sept. 1,1905	Aug. 31,1912	
Uxbridge	4,671	Charles M. Pennell				
Wakefield	11,404	Willard B. Atwell	1	Aug. 25,1911	—— —,1912	1,800
Walpole	4,892	Frederic Wm. Kingman	1	June 1,1905	July 1,1912	2,100
Waltham	27,834	Wm. Dwight Parkinson	(1)	June —,1898		2,500
Ware	8,774	George Wilbert Cox	1	Aug. —,1902	June 30,1912	2,000
Wareham	4,102	Herman N. Knox	1	Jan. 29,1910	Apr. 1,1912	1,700
Warren	4,188	Wesley E. Nims				
Watertown	12,875	Wilfred H. Price	1	Feb. —,1908	Sept. 1,1912	2,200
Webster	11,509	Ernest Wm. Robinson	1	June —,1903	Aug. —,1912	2,100
Wellesley	5,413	William Foye Johnson	1	July 1,1909	June 30,1912	2,500
Westboro	5,446	Harry C. Waldron	1	Sept. —,1895	.....do	1,800
Westfield	16,044	Charles Lafayette Simmons.	1	Aug. —,1903	June —,1912	2,600
West Springfield	9,224	Clarence Elwood Brockway.	1	Sept. —,1899	Sept. 1,1911	1,800
Weymouth	12,895	Parker Tufts Pearson	1	May 1,1909	May 1,1912	2,000
Whitman	7,292	Geo. Francis Ellinwood	1	Aug. 1,1908	Dec. 31,1911	1,700
Winchendon	5,678	E. S. Cobb				
Winchester	9,309	Schuyler F. Herron	1	Aug. —,1907	July 31,1912	2,700
Winthrop	10,132	Frank A. Douglas	1	—— —,1897	Aug. 31,1911	2,400
Woburn	15,608	George Irving Clapp	3	June —,1903	June 30,1914	2,200
Worcester	145,986	Homer Pierce Lewis	3	Apr. —,1903	June 1,1912	4,250
MICHIGAN.						
Adrian	10,763	Charles Wm. Mickens	2	June —,1904	June —,1913	2,200
Albion	5,833	William J. McKone	1	—— —,1898	Aug. 31,1912	1,700
Alpena	12,706	Edwin L. Parmenter	1	May —,1911	June 24,1912	1,750
Ann Arbor	14,817	Herbert Miner Slauson	1	Apr. —,1898	June 22,1912	2,700
Battle Creek	25,267	William Gibson Coburn	1	Sept. —,1895	Sept. —,1912	2,850
Bay City	45,166	E. E. Ferguson				
Belding	4,119	Frank C. Janes	1	Sept. —,1909	June —,1911	1,300
Benton Harbor	9,185	William Robins Wright	1	May —,1905	June 30,1912	2,000
Bessemer	4,583	Charles Robert Cobb	1		June —,1912	1,900
Big Rapids	4,519	Edward Whitney				
Boyne City	5,218	Leslie Anderson Butler	2	Sept. —,1909	June —,1912	1,800
Cadillac	8,375	George A. McGee			Sept. 5,1913	2,050
Calumet	32,845	Edward J. Hall	2	July 1,1910	June 30,1913	3,500
Charlotte	4,886	Charles Howard Carrick	1	Sept. —,1906	June 16,1912	1,900
Cheboygan	6,859	Washington L. Barr	1	Apr. 5,1911	June 23,1912	1,200
Coldwater	5,945	Chas. A. Randolph Stone	1		June —,1912	1,600
Detroit	465,766	Wales Cumberland Martindale.	3	July —,1897	July —,1912	6,000
Dowagiac	5,088	Warren E. Conkling	1	June —,1896	June —,1912	1,600
Escanaba	13,194	F. E. King	1	Aug. —,1910	July —,1912	2,500
Flint	38,550	Alvin Nelson Cody	1	June —,1904	June 24,1912	2,650
Gladstone	4,211	Edward J. Willman	2	Apr. —,1906	Sept. —,1912	1,600
Grand Haven	5,856	Lawrence H. van den Berg.	1	Apr. —,1910	June 30,1912	2,000
Grand Rapids	112,571	Wm. Albert Greeson	1	June —,1906	July —,1912	3,750
Greenville	4,045	Chester Fowle Straight	2	Sept. —,1901	—— —,1913	1,700
Hancock	8,981	Eugene La Rowe	1	Feb. —,1902	July 8,1912	2,200
Hastings	4,383	Marion W. Longman	1	July —,1911	July —,1912	1,600
Highland Park	4,120	T. J. Knapp				
Hillsdale	5,001	Samuel Jerome Gier	2	—— —,1900	—— —,1912	1,600
Holland	10,490	E. E. Fell	4	July 1,1910	July 1,1915	2,000

[1] Indefinite term.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
MICHIGAN—contd.						
Houghton	5,113	John Arnold Doelle	1	Sept. —, 1903	June 16, 1912	$2,400
Ionia	5,030	William Sherman Lister	3	May —, 1908	July —, 1912	1,900
Iron Mountain	9,216	Lee Earll Amidon	1	July 1, 1898	June 30, 1912	2,800
Ironwood	12,821	John V. Brennan	1	July 1, 1907	July 1, 1912	2,300
Ishpeming	12,448	E. E. Scribner				
Jackson	31,433	Edward O. Marsh	1	July —, 1911	June —, 1912	2,500
Kalamazoo	39,437	Shattuck O. Hartwell	1	July 1, 1901	June 30, 1912	3,250
Lansing	31,229	Edwd. Page Cummings	1	Apr. —, 1907	June —, 1912	2,500
Ludington	9,132	Frank Estes Millar	3	July —, 1908	June —, 1913	2,000
Manistee	12,381	Samuel W. Baker	1	—— —, 1898	June 30, 1912	2,100
Manistique	4,722	George P. Edmonds	1	Sept. —, 1910	June —, 1912	1,700
Marquette	11,503	Gustav Wm. Gehrand	1	July 1, 1908	June 30, 1912	3,000
Marshall	4,236	A. H. Washburn	1	Nov. —, 1908	June —, 1912	1,500
Menominee	10,507	John Nicholas Davis	1	June 24, 1911	July 11, 1912	2,250
Monroe	6,893	R. C. Smith				
Mount Clemens	7,707	Arthur Scott Hudson	1	Sept —, 1909	June 30, 1912	1,850
Muskegon	24,062	Joseph M. Frost	1	Sept. —, 1903	July 1, 1912	3,000
Negaunee	8,460	Orr Schurtz	1	May —, 1901	....do	2,100
Niles	5,156	Martin B. Travis	1	May —, 1910	June 9, 1911	1,800
Norway	4,974	George Gordon Malcolm	1	July 1, 1909	July 1, 1912	1,800
Owosso	9,639	Willis E. Hanson	1	Sept. —, 1909	June —, 1912	2,200
Petoskey	4,778	Ernest C. Hartwell	1	—— —, 1909	—— —, 1912	1,800
Pontiac	14,532	R. L. Jenner				
Port Huron	18,863	Walter F. Lewis	1	July 1, 1899	June 30, 1912	2,400
River Rouge	4,163	Alexander McDonald	3	Apr. —, 1909	June —, 1912	1,400
Saginaw:						
East side	50,510	Eugene Clarence Warriner.	1	July 1, 1899	June 30, 1912	3,000
West side		Philipp Huber	1	Apr. —, 1903	....do	2,400
St. Joseph	5,936	Ernest P. Clarke	1	July —, 1899	July 1, 1912	1,800
Sault Ste. Marie	12,615	Matthew John Walsh	1	Aug. 22, 1911	....do	2,200
Three Rivers	5,072	J. A. Wiggers	1	July 18, 1911	June 7, 1912	1,500
Traverse City	12,115	Leon L. Tyler	1	July 23, 1911	June —, 1912	2,000
Wyandotte	8,287	Hiram Charles Daley	1	Feb. —, 1908	July 1, 1912	1,800
Ypsilanti	6,230	William Benton Arbaugh.	3	Jan. —, 1903	June 30, 1913	2,000
MINNESOTA.						
Albert Lea	6,192	C. C. Baker	1	Apr. —, 1911	June 30, 1912	2,100
Austin	6,960	George A. Franklin	1	Mar. —, 1906	June —, 1912	2,500
Bemidji	5,099	William Penn Dyer	2	Mar. 1, 1910	June 1, 1913	2,000
Brainerd	8,526	W. C. Cobb				
Chisholm	7,684	James P. Vaughan	1	May —, 1907	June —, 1912	
Cloquet	7,031	Peter Olesen	1	Aug. 27, 1909	June 10, 1912	2,200
Crookston	7,559	A. B. Hess	1	Mar. —, 1911	June 30, 1912	2,200
Duluth	78,466	Robert Edward Denfeld	3	July 19, 1885	July 31, 1914	4,500
Eveleth	7,036	Burton Otto Greening	1	Aug. —, 1904	June 30, 1912	2,800
Faribault	9,001	Leslie J. Montgomery	1	Aug. —, 1909	Aug. —, 1912	2,000
Fergus Falls	6,887	Ray Butts MacLean	1	May —, 1907	June 10, 1912	2,000
Hibbing	8,832	Herbert Blair	1	July 1, 1909	July 1, 1912	3,300
Little Falls	6,078	Harry E. White	1	Aug. 1, 1903	June 1, 1912	1,900
Mankato	10,365	Frederick James Sperry	1	July —, 1909	....do	2,100
Minneapolis	301,408	Charles Morison Jordan	3	July —, 1892	July 1, 1913	5,500
Moorhead	4,840	Herbert R. Edwards	1	Aug. —, 1909	June 4, 1912	1,950
New Ulm	5,648	Henry C. Hess	1	Aug. 1, 1910	Aug. 1, 1912	2,100
Owatonna	5,658	Philip J. Kuntz	1	Mar. 8, 1899	Aug. 1, 1911	2,000
Red Wing	9,048	J. L. Silverwale				
Rochester	7,844	Charles Lingle Woodfield.	1	Apr. —, 1909	June —, 1911	2,000
St. Cloud	10,600	Augustus N. Farmer	3		June —, 1913	2,500
St. Paul	214,744	Sylvanus Laurabee Heeter.	2	July 15, 1906	June 1, 1912	5,000
St. Peter	4,176	William Burton Thornburgh.	1	Apr. —, 1910	June —, 1912	1,600
South St. Paul	4,510	D. Edward Hickey	1		Aug. 1, 1912	1,600
Stillwater	10,198	William Harrod Hollands.	2	Aug. —, 1908	July 31, 1912	2,300
Two Harbors	4,990	H. E. Flynn	1	—— —, 1909	June —, 1911	2,300
Virginia	10,473	Lafayette Bliss	3	June 1, 1904	Aug. 1, 1912	3,000
Willmar	4,135	G. A. Foster	1	July 2, 1910	June 1, 1912	1,800
Winona	18,583	Raymond A. Kent	1	June 17, 1911	Aug. 1, 1912	2,000
MISSISSIPPI.						
Biloxi	8,049	R. P. Linfield				
Brookhaven	5,293	E. B. Allen				
Clarksdale	4,079	Harvey Brown Heidelberg.	1	May —, 1905	Aug. —, 1912	2,000
Columbus	8,988					

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
MISSISSIPPI—con.						
Corinth	5,020	James Allen Caldwell		Apr. 19, 1911		$2,000
Greenville	9,610	Eli Everette Bass	1	Sept. 1, 1884	Sept. 1, 1912	2,250
Greenwood	5,836	Charles E. Saunders	1	Sept. —, 1897	Sept. —, 1912	2,100
Gulfport	6,386	Charles Arthur Williamson.	1	June 1, 1910	May 31, 1912	2,000
Hattiesburg	11,733	Friley Benjamin Woodley.	1	June —, 1901	June —, 1912	2,250
Jackson	21,262	Edward Latta Bailey				
Laurel	8,465	Richard Henry Watkins.	1	May —, 1907	June 1, 1912	2,200
McComb	6,237	Henry Preston Hughes	3	May —, 1901	June 1, 1914	2,250
Meridian	23,285	Thomas Percy Scott	2	June 18, 1910	Aug. 1, 1912	2,500
Natchez	11,791	J. H. Owings				
Vicksburg	20,814	John Pinckney Carr	1	—— —, 1906	Aug. 31, 1911	2,100
Water Valley	4,275	W. M. Cox	1	Aug. —, 1911	May 26, 1912	1,200
West Point	4,864	Charles Fletcher Capps	3	Aug. —, 1907	June —, 1913	1,800
Yazoo	6,796	M. Rose	1	May 11, 1905	Apr. 1, 1912	2,250
MISSOURI.						
Aurora	4,148	William Harry Moore	1	May —, 1909	June 30, 1911	1,200
Boonville	4,252	M. A. O'Rear	1	May —, 1903	do	1,800
Brookfield	5,749					
Cape Girardeau	8,475	G. D. Reavis	1	Apr. —, 1911	July 1, 1912	1,380
Carterville	4,539	Worth James Osburn	2	May 25, 1908	do	1,350
Carthage	9,483	Joseph Martin White	1	July 1, 1903	June 30, 1912	2,500
Chillicothe	6,265	Alexander Royal Coburn	1	July 1, 1908	July 1, 1912	1,800
Clinton	4,992	Arthur Lee	1	June 1, 1902	June 1, 1912	1,800
Columbia	9,662	William Henry Hays	2	Aug. 1, 1904	Aug. 1, 1912	2,000
De Soto	4,721	W. C. Ogier	1	—— —, 1901	June 30, 1911	1,400
Flat River	5,112	William L. Johns	1	May —, 1905	June 1, 1912	1,440
Fulton	5,228	Ross Albert Wells	1	July 1, 1909	June 30, 1912	1,500
Hannibal	18,341	Livingstone McCartney	1	do	do	2,400
Independence	9,859	William L. C. Palmer	1	May 28, 1901	Sept. 1, 1912	1,800
Jefferson City	11,850	Robert B. D. Simonson	1	Apr. —, 1907	June 30, 1911	1,600
Joplin	32,073	George Victor Buchanan	2	June —, 1908	June 30, 1912	3,000
Kansas City	248,381	James M. Greenwood	1	June —, 1874	June 30, 1910	4,500
Kirksville	6,347	Charles Banks	1	Sept. —, 1910	June 30, 1912	1,200
Kirkwood	4,171	M. E. Hard	1	—— —, 1908	June —, 1912	2,200
Lexington	5,242	Melvin Joseph Patterson.	1	—— —, 1906	May 31, 1912	1,500
Louisiana	4,454	Robert Rossel Rowley	1	May —, 1911	Sept. —, 1912	1,350
Maplewood	4,976					
Marshall	4,869	Frank F. Thompson	1	July 1, 1910	July 1, 1912	1,600
Maryville	4,762	Charles A. Hawkins	1	Jan. —, 1904	May —, 1912	1,500
Mexico	5,939	Lee Byrnes Hawthorne	1	Sept. —, 1903	June —, 1912	1,800
Moberly	10,923					
Monett	4,177	H. E. Blaine	1	Sept. —, 1904	May 18, 1912	1,400
Nevada	7,176					
Poplar Bluff	6,916	William Lee Barrett	2	Apr. 4, 1905	Sept. 11, 1913	2,000
St. Charles	9,437	Joseph Herring				
St. Joseph	77,403	John A. Whiteford	2	July 1, 1904	June 30, 1912	3,600
St. Louis	687,029	Ben Blewett	4	June —, 1908	June —, 1912	7,000
Sedalia	17,822	John Patrick Gass	1	July 1, 1908	July 1, 1912	2,400
Springfield	35,201	Jonathan Fairbanks	1	May —, 1875	May 19, 1911	2,250
Trenton	5,656	Geo. Hamilton Beasley	1	Feb. 1, 1911	July 1, 1912	1,500
Warrensburg	4,689	Edward Beatty	2	July 1, 1909	June 30, 1913	1,320
Webb City	11,817	R. S. Nichols	2	Sept. —, 1905	July —, 1911	2,000
Webster Groves	7,080	William Douglas Grove	1	Aug. 14, 1902	June 8, 1912	2,200
Wellston	7,312					
MONTANA.						
Anaconda	10,134	William Kilian Dwyer	1	—— —, 1906	July 31, 1911	2,700
Billings	10,031	Ward Higley Nye	2	Sept. 1, 1908	Aug. 1, 1913	[1] 2,900
Bozeman	5,107	Risdon J. Cunningham	3	Jan. —, 1905	June 10, 1914	2,500
Butte	39,165	George Ford Downer	1	July —, 1910	Aug. 1, 1912	4,000
Great Falls	13,948	Samuel D. Largent	3	June —, 1898	Aug. 31, 1914	3,500
Helena	12,515	John Dietrich	1	June 1, 1910	Aug. 1, 1911	3,500
Kalispel	5,549	William Delbert Swetland.	1	—— —, 1906	June —, 1912	2,200
Livingston	5,359	Benjamin Aaron Winans	1	—— —, 1911	May —, 1912	2,000
Miles City	4,697	J. A. Burger	1	May 1, 1909	Aug. 1, 1912	2,750
Missoula	12,869	J. Ulysses Williams	2	Apr. 1, 1906	do	2,700
Red Lodge	4,860	Alfred C. Carlson	1	Sept. 6, 1909	June 1, 1912	1,800
NEBRASKA.						
Beatrice	9,356	Edwin J. Bodwell	3	Aug. 1, 1908	July 31, 1912	2,000
Fremont	8,718	Archibald H. Waterhouse.	3	Apr. 15, 1908	June 30, 1914	3,000

[1] $3,000 in 1912-13.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
NEBRASKA—con.						
Grand Island	10,326	Robert J. Barr	3	Aug. —,1882	June —,1912	$2,100
Hastings	9,338	Clinton M. Barr	1	Sept. 10,1911	June 1,1912	2,000
Kearney	6,202	Harry E. Bradford	1	Sept. —,1909	June —,1911	2,100
Lincoln	43,973	William Logan Stephens	3	Aug. —,1903	Aug. —,1912	3,000
Nebraska City	5,488	George Ellsworth Martin	1	June 1,1908	June 1,1912	1,800
Norfolk	6,025	M. E. Crozier				
North Platte	4,793	Wilson Tout	1	Sept. 1,1908	Sept. 1,1911	1,500
Omaha	124,096	Ellis U. Graff	3	Aug. 1,1911	Aug. 1,1914	4,200
Plattsmouth	4,287	N. C. Abbott	1	Jan. 1,1911	July 1,1912	1,650
South Omaha	26,259	Nathaniel Marks Graham	3	Feb. 7,1907	July 1,1913	3,000
York	6,235	Walter Welles Stoner	3	—— —,1903	June 30,1914	2,400
NEVADA.						
Goldfield	4,838	Samuel Henry Thompson.	1	May 15,1911	July 31,1912	3,000
Reno	10,867	Benson Dillon Billinghurst.	4	July 1,1908	July 1,1913	3,000
NEW HAMPSHIRE.						
Berlin	11,780	George H. Whitcher	2	Jan. 1,1904	Jan. 1,1911	2,208
Claremont	7,529	William H. Cummings	1	Aug. 1,1905	June 30,1912	1,950
Concord: Union district. Penacook district.	21,497	Louis John Rundlett	1	July 1,1885	July 1,1911	2,700
		George Willis Sumner	1	July —,1908	July —,1911	1,400
Derry	5,123	Arthur Warren Reynolds	1	July —,1909	Aug. 31,1911	1,400
Dover	13,247	Ernest Warren Butterfield.	1	July 1,1911		2,000
Exeter	4,897	[1]				
Franklin	6,132	William Harvey Slayton	1	Aug. —,1907	June —,1911	1,500
Keene	10,068	George A. Keith	1	July 1,1905	June 30,1912	1,500
Laconia	10,183	Joseph H. Blaisdell	1	Sept. 1,1897	Sept. 1,1912	1,600
Lebanon	5,718	Thomas Arthur Roberts	1	June —,1904	Sept. 1,1911	1,710
Littleton	4,069	David F. Carpenter	1	July 15,1910	July 15,1911	1,350
Manchester	70,063	Charles W. Bickford	2	July 1,1900	June 30,1912	2,300
Nashua	26,005	James Hiram Fassett	1	Apr. —,1893	do	2,200
Portsmouth	11,269	James A. MacDougall	1	July 15,1909	July 15,1912	1,800
Rochester	8,868	Everett A. Pugsley				
Somersworth	6,704	Frank S. Sutcliffe				
NEW JERSEY.						
Asbury Park	10,150	Fred Strong Shepherd	5	Sept. 1,1899	Sept. 1,1912	3,200
Atlantic City	46,150	Charles B. Boyer				
Bayonne	55,545	John Wesley Carr	3	Jan. 26,1909	Sept. 1,1913	5,000
Bloomfield	15,070	George Morris	4	Dec. 1,1904	June 30,1913	3,700
Boonton	4,930	Milo Pearson Reagle	1	Sept. —,1903	June 30,1912	1,800
Bordentown	4,250	Harry Vance Holloway	1	Apr. 4,1910	June —,1912	1,400
Bridgeton	14,209	H. J. Neal	3	July 1,1909	July 1,1914	2,000
Burlington	8,336	Wilbur Watts				
Camden	94,538	James E. Bryan	3	—— —,1899	Dec. 31,1913	3,750
Collingswood	4,795	Amos Haines Flake [2]	1	Sept. —,1907	June —,1912	2,000
Dover	7,468	Wiley Victor Singer	1	Feb. —,1908	June 30,1912	2,000
East Orange	34,371	Vernon L. Davey	[3]	June —,1890		4,500
East Rutherford	4,275	Francis J. Oglee [2]	[3]	Sept. —,1896		1,700
Elizabeth	73,409	Richard Ernest Clement	7	July 1,1907	June 30,1914	3,600
Englewood	9,924	Elmer Charles Sherman	3	July 1,1904	do	3,500
Fort Lee	4,472	Leonidas H. Van Syckle				
Garfield	10,213	William Henry Steeger [2]	3	July —,1907	July —,1912	1,800
Gloucester	9,462	Wilmer F. Burns				
Guttenberg	5,647	I. G. Miller				
Hackensack	14,050	William E. Stark [2]	1	May —,1911	Sept. —,1912	3,000
Haddonfield	4,142	C. Ernest Dechant [2]	1	Sept. —,1907		1,900
Hammonton	5,088	Newton Clark Holdridge. [2]	1	Sept. —,1899	July —,1912	2,000
Harrison	14,498	John Dwyer				
Hoboken	70,324	Abraham Jay Demarest	[3]	Apr. 19,1897		3,500
Irvington	11,877	Frank Herbert Morrell	1	Sept. —,1875	June 30,1911	2,500
Jersey City	267,779	Henry Snyder	[3]	Mar. 19,1892		6,000
Kearney	18,659	Herman Dressel, jr	3	July 31,1907	—— —,1912	3,100
Lambertville	4,657	Louis E. Boutwell [2]	1	July 1,1907	June 30,1912	1,600
Lodi	4,138	Edgar F. Bunce [2]	1	Mar. 1,1910	do	1,400
Long Branch	13,298	Christopher Gregory	[3]	Feb. —,1889		3,700
Madison	4,658	Marcellus Oakey				
Millville	12,451	F. A. Ebert	1	June —,1911	July 1,1912	2,000
Montclair	21,550	Randall Spaulding	[3]	Sept. —,1874		4,250

[1] No superintendent. [2] Supervising principal. [3] Indefinite term.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
NEW JERSEY—continued.						
Morristown	12,507	Ira Winthrop Travell	1	July 1,1909	July 1,1912	$3,500
Newark	347,469	Addison Brown Poland	(1)	Mar. —,1901		6,000
New Brunswick	23,388	George H. Eckels	3	July 1,1910	July 1,1914	3,500
Newton	4,467	Howard E. Shimer [2]	1	do	June 30,1912	1,800
North Bergen	15,662	Milton F. Husted	(1)	Dec. 1,1906		2,400
North Plainfield	6,117	Henry C. Krebs [2]	(1)	Apr. —,1905		2,000
Nutley	6,009	John Reuben Beachler	3	Sept. —,1910	—— —,1913	3,000
Orange	29,630	James M. Miner				
Passaic	54,773	Ulysses G. Wheeler	1	Sept. 1,1910	Aug. 31,1912	3,500
Paterson	125,600	John R. Wilson	(1)	Sept. —,1906		3,600
Perth Amboy	32,121	Samuel E. Shull	(1)	Sept. —,1895		3,500
Phillipsburg	13,903	Lewis Osmun Beers	3	Aug. 20,1906	Apr. —,1914	1,700
Plainfield	20,550	Henry Martin Maxson	(1)	—— —,1892		4,000
Pleasantville	4,390	H. T. Marsteller [2]	3	—— —,1902	Sept. 1,1911	1,600
Princeton	5,136	Mabel Tilden Vanderbilt.[2]	1	Feb. 1,1906	June 30,1911	1,750
Rahway	9,337	William James Bicket	(1)	Sept. —,1906		3,000
Red Bank	7,398	J. Burton Wiley	1	—— —,1909	June —,1912	2,300
Ridgewood	5,416	William T. Whitney	3	June —,1905	June —,1913	3,000
Roosevelt	5,786					
Rutherford	7,045	Clarence A. Fetterly [2]	1	July 1,1911	June 30,1912	2,000
Salem	6,614	Oscar O. Barr	1	Aug. 6,1909	do	1,800
Secaucus	4,740	Robert Lee Saunders [2]	(1)	Sept. —,1905		1,500
Somerville	5,060	Wm. Alfred Ackerman [2]	(1)	May —,1905		2,400
South Amboy	7,007	Russell Martin Fitch [2]	3	Nov. —,1895	June 30,1913	1,440
South Orange	6,014	Henry Ward Foster [2]	5	June —,1900	June 30,1914	3,300
South River	4,772	Francis P. O'Brien [2]	1	Sept. —,1908	June —,1912	1,500
Summit	7,500	Clinton S. Marsh	1	July 1,1910	July 1,1911	3,000
Town of Union	21,023	Otto Ortel	(1)	Sept. —,1886		3,000
Trenton	96,815	Ebenezer Mackey	(1)	Sept. 1,1902		3,600
Vineland	5,282	Jacob J. Unger [2]	1	June —,1897	June —,1912	1,800
Weehawken	11,228	Cora E. Fiske [2]				
Westfield	6,420	J. J. Savitz				
West Hoboken	35,403	Elliott J. Tomlinson	(1)	Sept. 1,1907		2,800
West New York	13,560	H. Whitford Maxson [2]	1	June —,1910	July 1,1912	2,200
West Orange	10,980	Allton Harvey Sherman	(1)	Sept. —,1904		3,200
Woodbury	4,642	Henry C. Dixon	1	—— —,1906	June 30,1912	2,250
NEW MEXICO.						
Albuquerque	11,020	John Milne	1	June 2,1911	Aug. 31,1912	2,000
Raton	4,539	Thomas W. Conway	1	June 1,1908	June 1,1912	1,800
Roswell	6,172	Marcellus Hampton Brasher.	2	June 1,1907	July 1,1912	2,000
Santa Fe	5,072	James Alpheus Wood	1	June 6,1899	do	1,500
NEW YORK.						
Albany	100,253	Charles Wadsworth Cole	(1)	Feb. 1,1878		3,000
Albion	5,016	Willis G. Carmer	1	Aug. 1,1899	Aug. 1,1911	1,800
Amsterdam	31,267	Harrison T. Morrow	3	Aug. 1,1900	Aug. 1,1912	3,000
Auburn	34,668	Henry Dwight Hervey	(1)	July 20,1910		3,500
Ballston Spa	4,138	Wm. Almon Andrews [2]	1	Apr. —,1909	June 25,1912	1,500
Batavia	11,613	John Kennedy	1	Oct. —,1890	June 1,1912	2,000
Binghamton	48,443	Joseph Edward Banta	1	Aug. —,1905	July 31,1912	3,000
Buffalo	423,715	Henry Pendexter Emerson.	4	Jan. 1,1893	Dec. 31,1911	5,000
Canandaigua	7,217	Luther Norton Steele	1	Aug. 1,1907	Aug. 1,1912	2,400
Catskill	5,296	J. T. Peck Calkins	1	Aug. 1,1904	do	2,200
Cohoes	24,709	Edward Hayward	4	July 1,1901	July 1,1913	2,000
Corning	13,730	Hannibal H. Chapman	1	Sept. —,1909	June —,1912	2,500
Cortland	11,504	Ferdinand E. Smith	3	July 1,1896	Aug. 1,1912	2,400
Dunkirk	17,221	Delmer Elliott Batcheller.	1	Sept. 1,1908	Sept. 1,1912	2,500
Elmira	37,176	Don C. Bliss	1	May —,1911	Aug. —,1912	4,000
Fredonia	5,285	William B. Blaisdell	1	May —,1906	July 1,1911	1,200
Freeport	4,836	Arthur E. Barnes				
Fulton	10,480	James R. Fairgrieve	2	Jan. 1,1904	Dec. 31,1912	2,400
Geneva	12,446	Wm. Henry Truesdale	(1)	Aug. —,1890		2,600
Glens Falls	15,243	E. W. Griffith				
Gloversville	20,642	James A. Estee	1	Aug. 1,1890	July 31,1912	2,800
Gouverneur	4,128	Carl C. Alverson				
Hastings-on-Hudson.	4,552	W. R. Williams	3	—— —,1900	June —,1912	2,000
Haverstraw	5,669	Luther O. Markham	1	—— —,1887	July 31,1912	1,900

[1] Indefinite term.

[2] Supervising principal.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
NEW YORK—con.						
Hempstead	4,964	Adrian Henry Courtenay.	1	Sept. —,1909	June —,1912	$2,100
Herkimer	7,520	George M. Elmendorf	1	Feb. 1,1910	June —,1911	1,600
Hoosick Falls	5,532	Clyde L. Harvey	1	June —,1905	July 31,1911	1,800
Hornell	13,617	Elmer S. Redman	1	Aug. 1,1898	do	2,500
Hudson	11,417	Chas. Spencer Williams.	(1)	June —,1904		2,200
Hudson Falls	5,189	Francis A. Tefft	(1)	June —,1905	June 23,1911	1,600
Ilion	6,588	Harwood M. Schwartz	1	Apr. 1,1911	July 1,1912	1,700
Ithaca	14,802	Frank David Boynton	5	June —,1900	July 31,1915	3,600
Jamestown	31,297	Rovillus Rollin Rogers	3	Mar. —,1890	Aug. 1,1914	2,750
Johnstown	10,447	Erle L. Ackley	3	Feb. —,1910	July 31,1913	2,000
Kingston	25,908	Myron J. Michael	(1)	Aug. 1,1910		2,600
Lackawanna	14,549	Albert Everett Cook	1	Mar. —,1905	June 30,1912	1,900
Lancaster	4,364	P. P. Zeilman [2]	1	May —,1910	June —,1912	1,600
Little Falls	12,273	John Asa de Camp	1	June 28,1910	Sept. 1,1911	2,000
Lockport	17,970	Emmet Belknap				
Lyons	4,460	Worthy Hanks Kinney [2]	1	Sept. —,1888	June —,1912	1,800
Malone	6,467	Robert Miles Northup	1	May 1,1911	July 1,1912	1,500
Mamaroneck	5,699	George J. McAndrew	1	May —,1902	Sept. 5,1912	2,400
Matteawan	6,727	Leon J. Argetsinger [2]				
Mechanicsville	6,634	Lyman B. Blakeman	1	Oct. 7,1896	July 31,1911	1,500
Medina	5,683	James C. van Etten	1	Apr. —,1906	June 23,1912	1,800
Middletown	15,313	James Frederick Tuthill.	1	—— —,1890	do	2,600
Mount Vernon	30,919	Edwin Cornelius Broome	(1)	Mar. 1,1909		4,000
Newark	6,227	William M. Fort	1	Aug. 1,1907	July 1,1912	1,800
Newburgh	27,805	James M. Crane	1	Mar. —,1901	Mar. —,1912	2,200
New Rochelle	28,867	Albert Leonard	(1)	Mar. —,1907		4,500
New York	4,766,883	William Henry Maxwell.	6	Mar. 14,1898	Mar. 14,1916	10,000
Niagara Falls	30,445	Reuben A. Taylor	1	Aug. 13,1901	July 31,1912	3,000
North Tarrytown	5,421	Charles A. Benedict	1	Sept. 1,1910	July 1,1911	2,000
North Tonawanda	11,955	Richard Addison Searing.	(1)	Apr. —,1904		2,600
Norwich	7,422	Stamford Jay Gibson	1	Jan. —,1899	June 21,1912	2,000
Nyack	4,619	Edward J. Bonner	1	Mar. —,1908	July 1,1912	2,400
Ogdensburg	15,933	Horace H. Southwick	3	Sept. 1,1902	Sept. —,1914	2,100
Olean	14,743	Samuel J. Slawson	1	Feb. —,1907	Aug. 1,1911	2,500
Oneida	8,317	George Rowe Staley	3	May —,1909	Aug. 1,1913	1,800
Oneonta	9,491	George J. Dann	1	Apr. 1,1910	July 31,1911	2,000
Ossining	11,480	William H. Ryan	4	—— —,1903	June —,1913	2,500
Oswego	23,368	Charles W. Richards	2	Aug. 1,1910	Aug. 1,1912	1,800
Owego	4,633	Isaac Squire Carroll	1	Aug. 1,1908	July 31,1912	1,500
Peekskill:			1			
District No. 7.	15,245	Walter Harris Young		Aug. 1,1910	Aug. 1,1911	2,000
District No. 8.		Alexander D. Dunbar	(1)	—— —,1886		2,200
Penn Yan	4,597	N. Winton Palmer	1	Jan. 1,1906	Dec. 31,1911	1,200
Perry	4,388	Wm. Harvey McClelland [2]	1	Sept. —,1906	June 26,1912	1,800
Plattsburg	11,138	Frank Keely Watson	1	Oct. —,1905	July 31,1912	2,000
Port Chester	12,809	Edgar G. Lantman	3	Aug. —,1898	Sept. 1,1913	3,250
Port Jervis	9,564	Lincoln Joseph Roys	(1)	Jan. —,1911		1,900
Potsdam	4,036	Lewis E. Roberts	1	Aug. —,1905	July 1,1912	1,300
Poughkeepsie	27,936	Sylvanus R. Shear	(1)	Aug. 1,1910		3,000
Rensselaer	10,711	Arthur Z. Boothby	2	Feb. 1,1911	July —,1912	1,500
Rochester	218,149	Herbert Seeley Weet	4	July 1,1911	July 15,1915	5,000
Rome	20,497	Daniel James Kelly	1	Sept. 1,1909	July 31,1911	2,000
Salamanca	5,792	Thomas Stone Bell	1	—— —,1892	Sept. —,1912	2,000
Saranac Lake	4,983	Ira Morris Gast	1	Apr. —,1898	June —,1912	1,800
Saratoga Springs	12,693	Thomas Raymond Kneil	(1)	Sept. —,1892		2,250
Schenectady	72,826	A. R. Brubacher	(1)	June —,1908		3,700
Seneca Falls	6,588	Frederick John Medden.	1	Oct. —,1908	July —,1911	1,700
Solvay	5,139	Charles O. Richards	1	Sept. —,1886	July 1,1912	
Syracuse	137,249	Percy Meredith Hughes.	4	Mar. 1,1911	Jan. 1,1912	4,000
Tarrytown	5,600	Leslie V. Case [2]	6	May —,1900	June —,1911	2,300
Tonawanda	8,290	Frank K. Sutley	3	—— —,1904	Sept. —,1914	2,500
Troy	76,813					
Utica	74,419	Wilbur B. Sprague	(1)	Aug. 1,1909		3,500
Walden	4,004	Ezra W. Benedict [2]	1	June —,1899	June 24,1912	1,700
Watertown	26,730	Frank Somers Tisdale	1	July 19,1900	Aug. 1,1911	2,500
Watervliet	15,074	Hugh H. Lansing	1	July —,1907	July 31,1912	2,000
Waverly	4,855	P. C. Meserve	1	Sept. —,1909	June 25,1912	1,700
Wellsville	4,382	Howard Griffith Burdge [2]	1	Feb. 1,1907	July 1,1912	1,900
Whitehall	4,917	George Sheldon Ellis	1	July 1,1897	June 30,1912	1,700
White Plains	15,949	Charles Cornell Ramsay	1	June —,1908	Aug. 1,1912	4,000
Yonkers	79,803	Charles Eugene Gorton	(1)	Nov. 1,1883		5,000

[1] Indefinite term.

[2] Supervising principal.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
NORTH CAROLINA.						
Asheville	18,762	Richard Joseph Tighe	1	—— —,1900	Sept. 1,1911	$2,400
Burlington	4,808	George Currie Singletary	1			1,500
Charlotte	34,014	Alexander Graham	2	Feb. 20,1888	June 30,1911	2,100
Concord	8,715	A. S. Webb	1	July 1,1910	July 1,1912	1,400
Durham	18,241	William Donald Carmichael.	1	June 8,1906	June 8,1912	2,400
Elizabeth City	8,412	Samuel Lloyd Sheep	1	July 1,1907	July 1,1911	1,800
Fayetteville	7,045	W. S. Snipes				
Gastonia	5,759	Joe S. Wray	1	Aug. —,1901	May 31,1912	
Goldsboro	6,107	Joseph Emery Avent	1	July 1,1909	June 30,1912	1,500
Greensboro	15,895	James Lewis Mann	1	June 5,1910	June 5,1911	2,400
Greenville	4,101	H. B. Smith				
Henderson	4,503	John Thomas Alderman	1	Sept. 1,1899	June 30,1912	1,800
High Point	9,525	Thornwell Haynes	1	May —,1911	May —,1912	1,600
Kinston	6,995	Samuel B. Underwood	1	May 5,1911	May 31,1912	1,550
Lexington	4,163	Augustus Henry Jarratt	1	May 25,1909	May 11,1912	1,200
Monroe	4,082	Arthur Grier Randolph	1	May —,1911	May 31,1912	1,500
Newbern	9,961	Harvey Bernard Craven	1	Sept. —,1904	June 30,1912	1,800
Raleigh	19,218	Francis Marion Harper				
Reidsville	4,828	Thomas Wingate Andrews.	1	Sept. 1,1911	Aug. 31,1912	1,200
Rocky Mount	8,051	John Lory Harris	1	May 10,1911	—— —,1912	1,800
Salem	5,533	Wesley Bethel Speas [1]	2	July 6,1903	June 30,1913	1,150
Salisbury	7,153	Arch Turner Allen	1	July 4,1910	June 30,1912	1,500
Statesville	4,599	D. Matt. Thompson	1	—— —,1891	.....do.....	1,710
Tarboro	4,129	R. G. Kettrell				
Washington	6,211	Nathan Carter Newbold	1	July 29,1908	June 30,1912	1,800
Wilmington	25,748	John Jay Blair				
Wilson	6,717	Charles Lee Coon	1	July 1,1907	July 1,1912	1,800
Winston-Salem	17,167	Rowland Hill Latham	1	June 15,1910	June 15,1912	1,900
NORTH DAKOTA.						
Bismarck	5,443	Charles C. Root	1	July —,1910	July 10,1911	1,900
Devils Lake	5,157	Youell Gordon Barnell	1	Mar. 10,1911	May 31,1912	1,800
Fargo	14,331	William E. Hoover	1	Feb. —,1906	July 31,1912	2,900
Grand Forks	12,478	J. Nelson Kelly	1	—— —,1894	June 30,1912	3,300
Jamestown	4,358	Arthur Griswold Crane	2	July 26,1907	June 1,1912	2,000
Minot	6,188	Samuel Henry Wolf	3	May 15,1900	June 30,1912	2,000
Valley City	4,606	George W. Hanna				
OHIO.						
Akron	69,067	H. V. Hotchkiss	5	July —,1900	Aug. 31,1915	4,000
Alliance	15,083	Harvey L. Eby	1	June 28,1910	June 30,1912	2,000
Ashland	6,795	John A. McDowell	3	Sept. —,1908	Sept. —,1912	1,900
Ashtabula	18,266	Elmer A. Hotchkiss	4	July 1,1906	July —,1913	2,400
Athens	5,463	Beverly Oden Skinner	3	July —,1907	July —,1912	1,800
Barberton	9,410	James Montgomery Carr	4	June —,1906	Aug. 31,1915	2,000
Barnesville	4,233	William R. Butcher	2	May —,1907	Sept. —,1913	1,600
Bellaire	12,946	Wilson Hawkins	3	May —,1907	July 1,1913	2,200
Bellefontaine	8,238	J. W. McKinnon				1,800
Bellevue	5,209	Ellis F. Warner		Sept. —,1886		1,400
Bowling Green	5,222	Walter F. Shaw	1	June 15,1911	Sept. —,1912	1,500
Bucyrus	8,122	William Nelson Beetham.	3	July —,1907	July —,1913	1,850
Cambridge	11,327	H. Z. Hobson	4		Sept. 1,1911	1,650
Canal Dover	6,621	Franklin Paul Geiger	2	—— —,1902	July 1,1912	1,800
Canton	50,217	John K. Baxter	4	July —,1905	July —,1912	3,000
Chillicothe	14,508	Fred Clair Kirkendall	3	July —,1908	July —,1914	2,200
Cincinnati	363,591	Frank B. Dyer	5	Aug. 12,1903	—— —,1912	6,000
Circleville	6,744	W. E. Sealock				1,950
Cleveland	560,663	William Harris Elson	5	Apr. 30,1906	Jan. 7,1912	6,000
Columbus	181,511	Jacob Albright Shawan	2	July 1,1889	June 30,1912	4,000
Conneaut	8,319	Calvin Thomas Northrop.	3	Feb. 1,1902	July 1,1913	2,100
Coshocton	9,603	Alpha Cleveland Peirce	1	Feb. —,1911	June —,1912	1,200
Cuyahoga Falls	4,020	William H. Richardson	3	June —,1908	July 1,1914	1,700
Dayton	116,577	Edwin J. Brown	5	Sept. 1,1908	Sept. 1,1916	5,000
Defiance	7,327	Henry B. Mullholand	4	Feb. 20,1909	Sept. 1,1913	1,650
Delaware	9,076	William McKendree Vance.	4	Sept. 1,1906	Aug. 31,1913	2,200
Delphos	5,038	Eugene L. Mendenhall				
Dennison	4,008	W. H. Angel				
East Cleveland	9,179	William H. Kirk	3	July —,1891	Aug. —,1912	3,500
East Liverpool	20,387	Fred Henry Warren	4	May —,1908	Sept. 1,1913	2,500
East Youngstown	4,972					

[1] County superintendent.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
OHIO—continued.						
Elyria	14,825	William Raymond Comings.	5	—— —,1900	—— —,1913	$2,500
Findlay	14,858	John Franklin Smith	3	Mar. 22,1909	June 1,1912	2,111
Fostoria	9,597	Rolland Ward Solomon	3	June —,1908	June —,1912	1,800
Fremont	9,939	J. E. Collins	3	—— —,1906	—— —.1913	2,000
Galion	7,214	Isaac C. Guinther	3	—— —,1896	Sept. 1,1912	1,850
Gallipolis	5,560	Harvey Evan Conard	2	July 1,1905	July 1,1912	1,800
Greenfield	4,228	Ezekiel W. Patterson	3	—— —,1905	—— —,1912	1,600
Greenville	6,237	James Jamison Martz	1	Apr. 7,1908	July 1,1912	1,800
Hamilton	35,279	Darrell Joyce	4	Aug. 6,1903	Aug. 6,1915	[1] 3,100
Hillsboro	4,296	William Edward Arter	2	Sept. —,1908	Sept. —,1911	1,500
Ironton	13,147	James T. Begg	4	May —,1910	Sept. 1,1915	[2] 2,200
Jackson	5,468	James Edgar Kinnison	5	June —,1881	June —,1916	1,700
Kent	4,488	W. A. Walls	2	June —,1910	June —,1913	1,750
Kenton	7,185	N. E. Hutchinson				2,000
Lakewood	15,181	Charles P. Lynch	3	Jan. —,1911	Jan. —,1914	3,600
Lancaster	13,093	S. Herrick Layton	2	Apr. 25,1911	July 1,1913	2,000
Lima	30,508	John Davison	5	June —,1905	June —,1915	3,000
Logan	4,850	G. Otto Grady	3	Sept. 1,1909	Sept. 1,1913	1,500
Lorain	28,883	Albert C. Eldridge	5	May —,1905	Aug. 1,1913	2,500
Madisonville	5,193	Charles Moore Merry	1	Oct. —,1906	Sept. —,1912	2,700
Mansfield	20,768	H. H. Helter				2,500
Marietta	12,923	Jesse V. McMillan	3	July —,1902	Sept. —,1911	2,400
Marion	18,232	Henry Allen Hartman	2		June 30,1912	2,100
Martins Ferry	9,133	Guy William Finch	1	May —,1911	June —,1912	2,000
Massillon	13,879	Lewis Edwin York	2	Apr. 28,1911	June 30,1913	2,100
Miamisburg	4,271	Wm. Tecumseh Trump	3	June —,1906	June —,1913	1,800
Middletown	13,152	Ralph Richard Upton	1	July 1,1909	June 30,1912	2,400
Mingo Junction	4,049	Frank Linton	3	—— —,1908	—— —,1912	1,800
Mount Vernon	9,087	John Sill Alan	3	Jan. —,1907	Sept. 1,1913	2,100
Nelsonville	6,082	Aaron Grady	1	Jan. 4,1900	Sept. 1,1911	1,600
Newark	25,404	Wilson Hawkins	2	July 1,1911	July 1,1913	2,500
New Philadelphia	8,542	George C. Maurer	3	July 1,1893	Sept. 1,1914	2,000
Niles	8,361	W. C. Campbell	2	June 1,1910	June 1,1912	2,100
Norwalk	7,858	Alexander D. Beechy	2	—— —,1891	Aug. 31,1912	2,000
Norwood	16,185	W. S. Cadman	1	—— —,1896	Aug. 31,1911	
Oberlin	4,365	Howard L. Rawdon	3	June 15,1908	Aug. 31,1914	[3] 1,500
Painesville	5,501	Frank H. Kendall	3	July 1,1902	July 1,1913	1,800
Piqua	13,388	George C. Dietrich	3	July 1,1909	....do	2,300
Portsmouth	23,481	Frank Appel	2	Feb. 15,1908	....do	2,350
Ravenna	5,310	Edward O. Trescott				
St. Bernard	5,002	John La Fayette Trisler	3	—— —,1909	Sept. —,1914	2,300
St. Marys	5,732	Charles Curtis McBroom	3	June 1,1907	June 1,1914	1,600
Salem	8,943	Jesse S. Johnson	2	—— —,1900	Aug. 31,1911	2,200
Sandusky	19,989	Homer B. Williams	4	—— —,1898	Aug. 31,1913	3,000
Shelby	4,903	Samuel H. Maharry	3	Mar. —,1905	Sept. 1,1912	1,710
Sidney	6,607	Herbert R. McVay	3	Aug. —,1902	—— —,1914	2,120
Springfield	46,921	Carey Boggess	5	Apr. —,1894	Aug. 31,1912	3,000
Steubenville	22,391	R. L. Ervin				2,500
Tiffin	11,894	Charles Allen Krout	5	Aug. —,1900	Aug. —,1912	2,000
Toledo	168,497	Wm. Backus Guitteau	3	Oct. —,1909	....do	4,500
Toronto	4,271	Saml. Kennedy Mardes				
Troy	6,122	Charles W. Cookson	3	Aug. 8,1906	Sept. 1,1913	2,000
Uhrichsville	4,751	Luther E. Everett	3	July 1,1901	July 1,1914	1,500
Urbana	7,739	I. N. Keyser	4	Aug. 31,1901	Aug. 31,1912	2,000
Van Wert	7,157	J. P. Sharkey	2	June —,1898	Aug. —,1912	1,800
Wapakoneta	5,349	Frank Eugene Reynolds	3	Feb. 6,1909	Aug. 31,1914	2,000
Warren	11,081	Charles E Carey	4		Aug. 1,1911	3,000
Washington C. H.	7,277	William McClain	3	May —,1909	Sept. —,1913	2,500
Wellston	6,875	Clarence Dayton Walden	2	July 1,1910	June 30,1913	1,600
Wellsville	7,769	Arthur D. Horton	2	May —,1909	May 31,1913	1,900
Wilmington	4,491	Edwin P. West	3	—— —,1909	Sept. 1,1912	1,850
Wooster	6,136	James E. Fitzgerald	3	May —,1909	—— —,1912	2,000
Xenia	8,706	Edwin Bruce Cox	3	June —,1881	June 30,1914	2,000
Youngstown	79,066	Novetus Holland Chaney	4	July 7,1902	July 7,1914	4,000
Zanesville	28,026	Willard C. Bowers	2½	Dec. 6,1909	June 1,1912	2,500
OKLAHOMA.						
Altus	4,821	William H. Decker	1	Sept. —,1908	Sept. —,1912	1,650
Ardmore	8,618	G. W. Richards				
Bartlesville	6,181	W. J. Weiner				
Chickasha	10,320	William F. Ramey	1	May 25,1908	June 30,1912	2,100
Durant	5,330	Walter Hendricks Echols	1	July 6,1908	July 31,1912	1,800
El Reno	7,872	Fredk. Noble Howell	1	June 1,1900	May 31,1912	2,000

[1] Salary increases $100 each year until $3,400 is reached.
[2] Salary increases $100 each year until $2,500 is reached.
[3] Salary increases $100 each year until $1,700 is reached.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
OKLAHOMA—con.						
Enid	13,799	Thomas Walter Butcher.	1	July 1,1909	June 30,1912	$2,750
Guthrie	11,654	Fowler Dell Brooks	1	July 1,1911	do	1,800
Hugo	4,582	Henry Garland Bennett.	2	June 1,1910	June 1,1913	2,000
Lawton	7,788	Thomas Burley Rybolt.				
McAlester	12,954	Leslie T. Huffman	1	May —,1909	June 30,1912	1,900
Muskogee	25,278	Edwin S. Monroe	1	July 1,1909	July 1,1912	3,000
Oklahoma	64,205	W. A. Brandenburg	3	Jan. 1,1910	June —,1913	3,600
Okmulgee	4,176	Nelson Orlando Hopkins	1	Apr. —,1909	July 1,1912	1,800
Sapulpa	8,283	Albert C. Cohagan	1	—— —,1907	May 19,1912	1,800
Shawnee	12,474	Scott Glen	2	July —,1905	July 1,1912	2,250
Tulsa	18,182	Joseph G. Masters	1	Mar. —,1906	do	2,000
Vinita	4,082	W. G. Masterson	1	June —,1907	June —,1912	1,650
Wagoner	4,018	W. C. French				
OREGON.						
Albany	4,275	Chas. Wm. Boetticher	1	May —,1911	June 16,1912	1,600
Ashland	5,020	George A. Briscoe	1	do	—— —,1912	1,500
Astoria	9,599	John Gray Imel	3	Aug. 1,1909	Aug. 1,1914	2,000
Baker City	6,742	J. A. Churchill	1	—— —,1892	May —,1912	2,500
Corvallis	4,552	Rollin W. Kirk	1	July —,1909	June —,1912	1,600
Eugene	9,009	Guy Cadwalader Stockton.	1	Sept. —,1908	June 14,1912	2,000
La Grande	4,843	John D. Stant	3	June 1,1910	June 1,1913	2,000
Medford	8,840	M. S. Collins				
Oregon City	4,287	Fred J. S. Tooze	1	June —,1909	May 31,1912	1,800
Pendleton	4,460	J. S. Landers	1	Nov. 1,1906	June 30,1912	2,250
Portland	207,214	Frank Rigler				
Roseburg	4,738	John W. Groves	1	May —,1910	May 18,1912	1,350
St. Johns	4,872	Charles H. Boyd				
Salem	14,094	James M. Powers	3	July 1,1905	July 1,1913	2,250
The Dalles	4,880	Arthur C. Strange				
PENNSYLVANIA.						
Allentown	51,913	Francis Dimmick Raub.	3	June 1,1893	June —,1914	2,500
Altoona	52,127	Henry Houston Baish	3	Aug. 1,1908	May 31,1914	2,400
Ambridge	5,205					
Archbald	7,194	William A. Kelly	3	—— —,1905	—— —,1914	1,500
Ashland	6,855	William C. Estler	3	Aug. —,1888	June —,1914	1,500
Ashley	5,601	A. P. Cope[1]	1	June —,1909	June —,1911	1,200
Avalon	4,317					
Avoca	4,634	Thos. Aloysius Dixon[1]	1	Sept. 7,1907	June 8,1911	1,000
Bangor	5,369	John Wesley Gruver	3	June 1,1905	June 1,1914	1,500
Beaver Falls	12,191	Andrew Lester	3	May —,1908	June 1,1911	1,800
Bellefonte	4,145	Jonas Elwood Wagner[1]	3	Jan. —,1909	do	1,500
Bellevue	6,323	W. Espey Albig[1]	1	—— —,1909	Sept. —,1912	2,250
Berwick	5,357	James Garfield Sigman[1]	3	—— —,1906	—— —,1913	1,500
Bethlehem	12,837	William C. Sampson	3	July 1,1911	May —,1914	1,700
Blakely	5,345	H. B. Anthony[1]	3	Sept. —,1903	June —,1914	1,200
Bloomsburg	7,413	Lloyd Parvin Sterner	3	June —,1891	June —,1911	1,600
Braddock	19,357	Grant Norris	3	Mar. —,1903	June 1,1914	2,700
Bradford	14,544	Edwd. E. Schermerhorn.	3	Dec. —,1908	June —,1914	2,400
Bristol	9,256	Louise Dilworth Boggs	3	Apr. —,1897	June 1,1914	1,000
Butler	20,728	John Arthur Gibson	3	June 1,1896	do	2,800
Carbondale	17,040	Thomas L. Gilmartin				
Carlisle	10,303	John C. Wagner	3	July —,1903	June —,1914	1,800
Carnegie	10,009	T. J. George[1]	1	May —,1911	June 30,1912	2,500
Carrick	6,117	Wm. Howard Sprenkle	1	June —,1908	June —,1912	1,650
Catasauqua	5,250	Henry J. Reinhard[1]	3	July 1,1901	July 1,1913	1,450
Chambersburg	11,800	Samuel Gilwix	3	Aug. 1,1897	June 1,1914	1,200
Charleroi	9,615	James G. Pentz	3	June —,1909	June —,1914	1,700
Chester	38,537	Thomas Sessions Cole	3	Oct. 12,1906	June 1,1914	2,500
Clearfield	6,851					
Coaldale	5,154	John E. Gildea[1]	1		June 1,1912	1,100
Coatesville	11,084	William Truman Gordon	3		June —,1914	2,000
Columbia	11,454	Hiram W. Dodd	3	June —,1911	June —,1914	1,600
Connellsville	12,845	Stanley P. Ashe	3	Mar. —,1911	Apr. —,1914	1,800
Conshohocken	7,480	Elmer B. Ziegler	3	Feb. —,1904	June —,1914	1,800
Coraopolis	5,252	J. Elwood Wherry[1]	3	June —,1907	July 1,1914	2,000
Corry	5,991	Virgil Guilford Curtis	3	—— —,1905	June —,1911	1,600
Crafton	4,583	Jedediah H. Edgerton[2]	1	May —,1911	May 29,1912	1,800
Danville	7,517	Daniel N. Diffenbacher	3	Sept. 1,1907	June 1,1914	1,400
Darby	6,305	Charles P. Sweeny	3	July —,1898	June —,1914	1,500
Dickson City	9,331					
Donora	8,174	Marcellus De Vaughn, jr.[1]	1	June 14,1911	May 30,1912	1,500
Dorranceton	4,045	C. B. Hanyen, jr.[1]	3	—— —,1907	—— —,1913	1,400

[1] Supervising principal. [2] Principal of high school.

II.—SUPERINTENDENTS IN CITIES AND TOWNS OF 4,000 POPULATION AND OVER—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
PENNSYLVANIA—continued.						
Dubois	12,623	J. H. Alleman	3	June —,1902	June —,1911	$2,000
Dunmore	17,615	Charles Francis Hoban	3	—— —,1902	June 1,1914	2,400
Duquesne	15,727	Clyde Henry Walford[1]	1	Aug. 13,1906	July 1,1914	2,400
Duryea	7,487	Frederick J. Regan[1]	3	—— —,1895	Sept.—,1914	1,800
East Conemaugh	5,046					
Easton	28,523	William White Cottingham.	3	Aug. 24,1853	June 1,1911	2,000
East Pittsburg	5,615	G. W. Campman[1]	1	June —,1904	May 24,1912	1,600
Edwardsville	8,407	James O. Herman	3	—— —,1893	—— —,1911	1,200
Erie	66,525	Henry Clay Missimer	3	June —,1890	June —,1914	3,600
Etna	5,830					
Ford City	4,850	William W. Irwin[1]	3	—— —,1907	June 1,1912	1,700
Forest City	5,749	Lloyd H. Taylor[1]	3	Apr. —,1909	July 1,1914	1,200
Franklin	9,767	Lewis E. Cross	3	May —,1911	—— —,1914	1,500
Freeland	6,197	E. F. Hanlon				
Galeton	4,027	Roger B. Foote[1]	1	Apr. 14,1911	June 1,1912	1,350
Gettysburg	4,030	Willis Archer Burgoon[1]	1	June 1,1909	.....do.....	1,200
Gilberton	5,401					
Girardville	4,396	Patrick A. Kelley[1]	1	Aug. 18,1910	June 5,1912	1,140
Glassport	5,540	John Addison Erhard[1]	1	June —,1908	June 1,1912	1,500
Greensburg	13,012	Thomas Stone March	3	Sept. —,1904	June 1,1914	3,000
Greenville	5,909	G. B. Gerberich	3	June —,1908	June —,1914	2,000
Hanover	7,057	Joseph Caldwell Carey	3	Sept. —,1905	June 1,1914	1,500
Harrisburg	64,186	Frederick E. Downes	3	May —,1905	June —,1914	3,300
Hazleton	25,452	David Augustus Harman	3	Sept. —,1881	—— —,1914	3,000
Homestead	18,713	Walter S. Deffenbaugh	3	Apr. 1,1911	June 1,1914	2,400
Huntingdon	6,861	Edward R. Barclay	3	June 1,1902	.....do.....	1,600
Indiana	5,749					
Jeannette	8,077	Theodore B. Shank	3	June —,1905	June —,1914	2,000
Jersey Shore	5,381	William F. Yoder[1]	1	June 30,1909	June —,1911	1,200
Johnsonburg	4,334	George Willis Mitchell[1]	3	Sept. —,1908	—— —,1912	1,600
Johnstown	55,482	John Nichols Adee	3	May 5,1911	June 5,1914	3,500
Juniata	5,285	Marshall B. Wineland	1	July —,1909	June 1,1912	1,200
Kane	6,626	Frank R. Neild	3	June 1,1911	May —,1914	1,600
Kingston	6,449	J. Richmond Merkel[1]	1	Sept. —,1909	June —,1912	1,680
Kittanning	4,311	Frank Wilbur Goodwin	3	Mar. —,1907	June —,1914	1,800
Knoxville	5,651	George P. Snyder[1]	1	—— —,1909	June —,1912	
Lancaster	47,227	Peter Monroe Harbold	3	May 2,1911	June 5,1914	2,000
Lansdowne	4,066	Walter Leighton Philips	1	June —,1906	June —,1911	2,500
Lansford	8,321	Elmer Ellworth Kuntz	3	May —,1905	June 1,1914	1,700
Larksville	9,288					
Latrobe	8,777	Samuel Edgar Downs	3	June 1,1911	June 1,1914	2,400
Lebanon	19,240	Fred Woods Robbins	3	July 1,1911	.....do.....	2,500
Lehighton	5,316	Brinton McClellan Shull[1]	1	June —,1908	June —,1912	1,200
Lewistown	8,166	T. Latimer Brooks	3	Aug. 5,1910	June 2,1914	1,600
Lockhaven	7,772	Edward Sykes Ling	3	June —,1908	June 1,1914	1,500
Luzerne	5,426	Theron G. Osborne[1]	3	June —,1910	June —,1913	1,200
McKeesport	42,694	Joseph Burdette Richey	3	May —,1902	June —,1914	3,300
McKees Rocks	14,702	Thomas K. Johnston	3	May 3,1911	—— —,1914	2,250
Mahanoy City	15,936	William Nelson Ehrhart	3	June 1,1896	June 1,1914	1,650
Meadville	12,780	Russell Heacock Bellows	3	July 1,1908	.....do.....	2,100
Mechanicsburg	4,469	Samuel C. Beitzel[1]	1	June 1,1906	June 1,1912	1,000
Middletown	5,374	Harry J. Wickey	3	June —,1899	June 1,1914	1,200
Millvale	7,861	Curtis C. Williamson[1]	1	June —,1910	June 1,1912	1,600
Milton	7,460	William Andrew Wilson	3	June 1,1905	June 1,1914	1,800
Minersville	7,240	Wilbur Merrill Yeingst[1]	3	June —,1908	June —,1912	1,800
Monessen	11,775	Harry Elmer Gress	3	June —,1910	June —,1914	2,000
Monongahela	7,598	Renwick G. Dean	3	Aug. —,1906	June 1,1913	1,800
Mount Carmel	17,532	Samuel Halsey Dean	3	June 1,1893	June 1,1914	1,800
Mount Oliver	4,241	Miss Minnie Ubinger[1]	1	.....	June —,1912	
Mount Pleasant	5,812	Urie Lee Gordy	1	June —,1907	June —,1912	1,800
Munhall	5,185	Amos Engle Kraybill[1]	1	July 10,1911	Sept. 1,1912	2,400
Nanticoke	18,877	Alton P. Diffendafer	3	Jan. 1,1909	June —,1914	2,400
New Brighton	8,329	Floyd Atwell	3	June 5,1911	June 5,1914	2,100
New Castle	36,280	Thomas A. Kimes	3	June —,1905	July —,1914	2,400
New Kensington	7,707	M. C. Turrell[1]	1	—— —,1909	—— —,1911	2,400
Norristown	27,875	Allen S. Martin	3	Jan. 1,1906	June 1,1911	2,500
Northampton	8,729	William David Landis	3	June —,1905	June —,1914	1,700
North Braddock	11,824	John Lloyd Spitler	1	.....	June 1,1911	2,100
Oil City	15,657	James Joseph Palmer	3	May —,1908	June —,1911	2,500
Old Forge	11,324					
Olyphant	8,505	Michael W. Cummings	3	June —,1903	June —,1911	1,500
Parsons	4,338	Ebenezer A. Evans[1]	1	Nov. —,1907	June —,1912	1,200
Philadelphia	1,549,008	Martin Grove Brumbaugh.	1	June 1,1906	Dec. 31,1911	7,500
Phoenixville	10,743	Robert Edward Laramy	3	May 4,1905	May 1,1914	2,000

[1] Supervising principal.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
PENNSYLVANIA—continued.						
Pitcairn	4,975	Arthur Bates Benn	1	June —,1909	June —,1912	$1,400
Pittsburgh	533,905	Samuel Andrews	3	June —,1899	June —,1914	7,000
Pittston	16,267	Charles A. Judge	3	June —,1909	June —,1912	1,800
Plymouth	16,996	Sherman Levi Smith [1]	1	Aug. —,1908	May 31,1911	1,600
Pottstown	15,599	William W. Rupert	3	June —,1888	June —,1914	1,600
Pottsville	20,236	Stephen A. Thurlow	3	July —,1907	—— —,1914	1,800
Punxsutawney	9,058	Frank S. Jackson	3	Dec. —,1908	June —,1914	1,900
Rankin	6,042	Rozell S. Penfield [1]	1	June 15,1911	June 15,1912	1,500
Reading	96,071	Charles S. Foos	3	June 1,1902	June —,1914	4,000
Renovo	4,621	George A. Mincemoyer [1]	1	June —,1908	May —,1912	1,200
Ridgway	5,408	Walter Merton Peirce [1]	.....	June —,1907	July 1,1912	2,250
Rochester	5,903	William Sanders Taft	3	July 1,1910	—— —,1914	1,800
St. Clair [boro (Schuylkill Co.)]	6,455					
St. Marys	6,346	J. J. Lynch	1	June 1,1902	June 1,1912	1,800
Sayre	6,426	Lewis Edwin De Laney [1]	1	Jan. —,1908	June —,1912	1,600
Schuylkill boro (P. O.: R. F. D., Phoenixville).	4,747					
Scotland	5,456					
Scranton	129,867	George Howell	3	June 1,1908	June 1,1914	5,000
Sewickley	4,479	William Edward Borger [1]	1	July 1,1909	July 1,1912	2,500
Shamokin	19,588	Joseph Howerth	3	Feb. 1,1902	June 1,1914	2,500
Sharon	15,270	Samuel H. Hadley	3	June —,1902	June —,1914	2,300
Sharpsburg	8,153	A. S. Jamison [1]	1	June 10,1911	June —,1912	1,800
Shenandoah	25,774	J. W. Cooper	3	Apr. 5,1897	June —,1911	2,000
Slatington	4,454	James Wilson Snyder [1]	3	Dec. —,1906	June —,1914	1,500
South Bethlehem	19,973	Owen R. Wilt	3	—— —,1886	June 1,1914	1,800
South Fork	4,592	William C. Crawford [1]	1	July —,1911	May 1,1912	900
South Sharon	10,190	L. R. Eckles	.....			
Steelton	14,246	Lemuel E. McGinnis	3	June —,1888	July 1,1914	2,500
Stroudsburg	4,379	Will H. Ramsey [1]	1	—— —,1887	June —,1912	1,350
Summit Hill	4,209	James F. Forrest [1]	3	Sept —,1909	June —,1913	1,250
Sunbury	13,770	Ira C. M. Ellenberger	3	June 1,1908	June 1,1914	2,400
Swissvale	7,381	Edward Maguire [1]	1	June —,1908	June —,1912	2,350
Swoyersville boro (P. O.: Maltby, Pa.).	5,396					
Tamaqua	9,462	J. F. Derr	3	May 5,1908	June —,1914	1,500
Tarentum	7,414	Andrew Doak Endsley	3	June —,1905	June —,1914	2,400
Taylor	9,060	William S. Robinson	3	June 5,1911	June —,1914	1,600
Throop	5,133					
Titusville	8,533	Henry Pease	3	Apr. —,1897	May 1,1912	2,250
Towanda	4,281	John H. Humphries [1]	3	June —,1904	—— —,1912	1,500
Turtle Creek	4,995	W. A. Rodgers	3	June —,1908	—— —,1912	1,800
Tyrone	7,176	Harry Scott Fleck	3	June 1, 1908	June —,1914	1,500
Uniontown	13,344	Clifford John Scott	3	.....do.....	June 1,1914	3,000
Warren	11,080	Robert Thompson Adams.	3	July —,1909	July 1,1914	2,250
Washington	18,778	Thomas Galbraith McLeary.	3	May 2,1911	June —,1914	2,500
Waynesboro	7,199	J. Hassler Reber	3	June —,1899	June —,1914	1,500
West Berwick	5,512	Harlan R. Snyder [1]	3	—— —,1900	—— —,1912	1,200
West Chester	11,767	Addison L. Jones	3	June 1,1889	June 1,1914	2,500
West Hazleton	4,715					
West Pittston	6,848	Louis P. Bierly [1]	1	Sept. —,1898	June —,1912	2,000
Wilkes-Barre	67,105	James M. Coughlin	3	—— —,1891	May 1,1914	4,500
Wilkinsburg	18,924	James L. Allison	3	—— —,1902	July —,1914	3,000
Williamsport	31,860	Charles Lose	3	June 1,1896	June 1,1914	2,500
Wilmerding	6,133					
Windber	8,013	Eden A. Hower [1]	1	June —,1908	June 1,1912	1,400
Winton	5,280					
York	44,750	Atreus Wanner	3	June 1,1890	June 1,1914	2,400
RHODE ISLAND.						
Bristol	8,565	John Post Reynolds	1	Sept. —,1884	Sept. —,1912	1,600
Burrillville	7,878	Joseph Cleveland Sweeney.	1	Sept. 1,1910	June 30,1912	1,500
Central Falls	22,754	Wendell Axtell Mowry	1	July 1,1898	Feb. 1,1912	2,000
Coventry	5,848	Henry M. Walradt	1	Aug. —,1909	Aug. 31,1912	1,500
Cranston	21,107	Valentine Almy	1	July 1,1895	Jan. 1,1912	1,900
Cumberland	10,107	William H. Winslow	1	June 30,1910	Aug. 1,1911	1,550
East Providence	15,808	James R. D. Oldham	1	Aug. 19,1911	Nov. —,1911	1,700
Johnston	5,935	William Henry Starr	1	June —,1898	Nov. —,1911	1,500
Lincoln	9,825	Emerson Leland Adams	1	Sept. 1,1905	Aug. 1,1912	1,600

[1] Supervising principal.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
RHODE ISLAND—continued.						
Newport	27,149	Herbert Warren Lull	1	June —,1900	Jan. —,1912	$3,000
North Kingstown	4,048	Frederick Dana Blake	1	Nov. —,1905	Nov. —,1911	
North Providence	5,407	Daniel P. McCarthy				
Pawtucket	51,622	Frank O. Draper	1	Mar. 1,1906	Dec. —,1911	3,000
Providence	224,326	Randall Judson Condon	(1)	June 1,1910		5,000
South Kingstown	5,176	William A. Brady				
Warren	6,585	Leroy Gilbert Staples	1	Aug. —,1910	Apr. —,1912	1,800
Warwick	26,629	Elwood Taylor Wyman	1	Nov. —,1905	Nov. —,1911	2,000
Westerly	8,696	William H. Holmes, jr	1	July 1,1903	July 1,1912	2,500
Woonsocket	38,125	Frank Emerson McFee	1	Dec. —,1886	Dec. 31,1911	2,000
SOUTH CAROLINA.						
Abbeville	4,459	William Renwick Bradley.	1	June 20,1910	June 1,1911	1,200
Anderson	9,654	Elliott Crayton McCants	2	June 22,1907	June 1,1912	1,600
Charleston	58,833	Henry P. Archer	4	Jan. —,1885	Dec. —,1911	2,500
Chester	4,754	William Herbert McNairy.	3	—— —,1906	Sept. —,1914	1,500
Columbia	26,319	Ernest Shuler Dreher	1	—— —,1895	Apr. —,1912	2,000
Florence	7,057	Wilfred Laadan Brooker	1	June —,1910	May 24,1912	1,800
Gaffney	4,767	William Josiah Francis	1	May 14,1909	May —,1912	1,200
Georgetown	5,530	William Clarence Bynum	1	May —,1907	May 31,1912	1,200
Greenville	15,741	E. L. Hughes [2]				
Greenwood	6,614	William Wardlaw Nickels.	1	May —,1909	July 1,1912	1,900
Laurens	4,818	Barney L. Jones	1	—— —,1901	—— —,1912	1,500
Newberry	5,028	Henry Lee Dean	1	Apr. —,1910	Apr. —,1911	1,500
Orangeburg	5,906	Albert Jerome Thackston.	1	—— —,1897	June 30,1912	1,800
Rock Hill	7,216	Lueco Gunter	1	Apr. 14,1911	May 31,1912	1,800
Spartanburg	17,517	Frank Evans	1	Sept. 12,1895	June 4,1912	2,000
Sumter	8,109	Samuel Henry Edmunds	1	—— —,1895	—— —,1912	2,400
Union	5,623	Davis Jeffries	1	—— —,1894	May —,1911	1,700
SOUTH DAKOTA.						
Aberdeen	10,753	Henry Charles Johnson	3	Apr. 1,1909	—— —,1913	2,500
Huron	5,791	Clyde Slone				
Lead	8,392	Theodore Saam	1	June —,1911	Aug. 1,1912	2,400
Mitchell	6,515	John Wesley McClinton	1	Jan. —,1911	June 1,1912	2,100
Sioux Falls	14,094	Archibald Arnott McDonald.	1	July 1,1907	July 1,1912	3,000
Watertown	7,010	Lester Burr Parsons	1	Sept. 1,1907	June 1,1912	2,000
TENNESSEE.						
Bristol	7,148	Percival Simpson Barnes	1	Sept. 11,1911	May —,1912	1,400
Chattanooga	44,604	Dewey A. Graves	3	June 1,1910	June 1,1913	2,500
Clarkesville	8,548	S. L. Smith				
Cleveland	5,549	Dewitt Clinton Arnold	1	June —,1885	May 31,1911	1,500
Columbia	5,754	R. L. Harris				
Dyersburg	4,149	Clarence Mott Walker	1	June 5,1911	May 24,1912	1,215
Jackson	15,779	Gentry Richard McGee	1	Mar. 10,1903	July 31,1912	1,800
Johnson City	8,502	James L. Brooks				
Knoxville	36,346	W. E. Miller				
Memphis	131,105	L. E. Wolf	2	May —,1911	June 1,1913	3,600
Morristown	4,007	W. L. Wallace				
Murfreesboro	4,679	P. A. Lyon				
Nashville	110,364	John Japheth Keyes	3	Aug. 9,1909	June 27,1913	3,600
Park City	5,126	John Riley Lowry	3	July —,1907	July 1,1914	1,600
Union City	4,389	Arthur C. Nute	3	July —,1906	June —,1914	1,650
TEXAS.						
Abilene	9,204	J. H. Burnett				
Amarillo	9,957	S. M. Byrd	2	June 10,1910	June 10,1913	2,500
Austin	29,860	Arthur Newell McCallum.	2	July 1,1903	July 1,1913	2,750
Beaumont	20,640	Henry Franklin Triplett	2	July 15,1903	July 15,1912	3,000
Belton	4,164	Louis H. Hubbard	1	Feb. 26,1910	June 5,1911	
Big Spring	4,102	Jacob Watt Dees	1	June 1,1911	June 1,1912	1,200
Bonham	4,844	Idris William Evans	1	May —,1901	June 30,1912	2,200
Brenham	4,718	William Dewitt Notley	1	June 12,1911	July 1,1912	1,800
Brownsville	10,517	Caswell G. Hallmark	1	May 31,1910	Sept. —,1912	1,500
Brownwood	6,967	George H. Carpenter	2	Sept. 1,1903	June —,1912	2,000

[1] Indefinite term.

[2] From State school directory for 1910–11.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
TEXAS—continued.						
Bryan	4,132	W. C. Lawson				
Cleburne	10,364	Robert Green Hall	1	Apr. —, 1907	June 30, 1912	$2,100
Corpus Christi	8,222	Charles Walton Crossley				
Corsicana	9,749	John Edward Blair	1	Aug. 1, 1908	July —, 1912	2,200
Dallas	92,104	James Albert Brooks	2	May 1, 1911	June 30, 1913	3,600
Denison	13,632	Frank Ben Hughes	1	Feb. 1, 1904	June —, 1912	2,000
Denton	4,732	John S. Carlisle	2	May —, 1899	May 31, 1912	2,000
El Paso	39,279	Norman Robert Crozier	2	May —, 1910	July 1, 1913	3,000
Ennis	5,669	J. D. Coghlan	2	Feb. —, 1909	May 5, 1912	1,800
Fort Worth	73,312	James William Cantwell	2	May —, 1908	June —, 1913	3,600
Gainesville	7,624	John P. Glassgow	1	Jan. 25, 1910	May 31, 1912	2,160
Galveston	36,981	John William Hopkins	1	July 1, 1896	July 1, 1912	3,600
Greenville	8,850	Louis Clyde Gee	1	Aug. 1, 1907	July —, 1912	1,800
Hillsboro	6,115	Thomas Dudley Brooks	1	Oct. —, 1906	July 31, 1912	2,000
Houston	78,800	Paul Whitfield Horn	2	June 12, 1904	June 12, 1912	3,600
Houston Heights	6,984	L. W. Greathouse	1	July 1, 1911	July 1, 1912	1,500
Laredo	14,855	L. J. Christen				
Longview	5,155	Samuel Joseph Blocker	5	May 1, 1908	—— —, 1913	1,800
McKinney	4,714	John Hugh Hill	1	—— —, 1904	June —, 1912	1,460
Marshall	11,452	Bruce B. Cobb	1	June 1, 1910	June 1, 1912	2,000
Orange	5,527	James Evans Binkley	2	May 26, 1909	Sept. 1, 1912	1,800
Palestine	10,482	Walker King	1	Sept. 1, 1905	....do	1,800
Paris	11,269	Judge Givin Wooten	2	May —, 1893	Sept. —, 1913	2,500
Port Arthur	7,663	J. H. Bright	2	June 1, 1908	June 1, 1913	2,000
San Angelo	10,321	Felix Ezell Smith	2	Aug. 31, 1905	Mar. —, 1912	2,250
San Antonio	96,614	Charles James Lukin	2	July 1, 1908	June 30, 1913	3,600
San Marcos	4,071	G. M. Sims				
Sherman	12,412	Jay C. Pyle	2	June 1, 1907	June —, 1912	2,100
Sulphur Springs	5,151	Foster V. Garrison	2	June 10, 1906	Aug. 31, 1913	1,500
Sweetwater	4,176	Medicus Barney Johnson	2	June 1, 1911	June 1, 1913	1,700
Taylor	5,314	John Francis O'Shea	2	June 1, 1908	May 31, 1913	1,800
Temple	10,993	Justin F. Kimball	2	May —, 1900	July —, 1912	2,500
Terrell	7,050	Starlin M. N. Marrs	1	July 1, 1893	June 30, 1912	1,800
Texarkana	9,790	Oscar Lee Dunaway	1	May 28, 1911	July 31, 1912	2,000
Tyler	10,400	W. T. Adams				
Waco	26,425	John Compere Lattimore.	2	June 15, 1899	June 30, 1912	2,800
Waxahachie	6,205	G. B. Winn	1	May —, 1910	Sept. 1, 1912	1,700
Weatherford	5,074	Thomas William Stanley	1	Sept. —, 1894	May 31, 1912	1,600
Wichita Falls	8,200	T. L. Toland				
Yoakum	4,657	C. A. Peterson	1	Sept. 1, 1905	Sept. 1, 1912	1,600
UTAH.						
Logan	7,522	Alma Molyneux	2	June 20, 1907	June 30, 1912	1,800
Murray	4,057	Gideon M. Mumford	2	July 1, 1896	....do	1,700
Ogden	25,580	John Martin Mills	2	Aug. 1, 1909	June —, 1912	3,500
Provo	8,925	Lars Erhart Eggertsen	2	July 1, 1910	June 30, 1912	1,500
Salt Lake City	92,777	David Henry Christensen.	2	June 30, 1901	....do	4,800
VERMONT.						
Barre	10,734	Ozias Danforth Mathewson.	1	Sept. —, 1890	July 1, 1912	2,500
Bellows Falls	4,883	Orvis K. Collins	1	July 1, 1910	....do	1,800
Bennington (town).	8,698	Albert Watson Varney	1	Feb. —, 1902	July 1, 1911	2,000
Brattleboro (town).	7,541	Florence Maude Wellman.[1]	1	Sept. —, 1908	June —, 1912	950
Burlington	20,468	Henry Orson Wheeler	1	Apr. —, 1880	Apr. 1, 1911	2,250
Montpelier	7,856	Sherburn C. Hutchinson	1	Apr. 1, 1911	June 30, 1912	2,500
Rutland	13,546	David B. Locke				
St. Albans	6,381	George S. Wright	1	Aug. —, 1909	July 1, 1912	1,800
St. Johnsbury (town).	8,098	Corwin Ford Palmer	1	Sept. —, 1908	July —, 1912	2,000
Springfield	4,784	Edward M. Roscoe				
VIRGINIA.						
Alexandria	15,329	William H. Sweeny	4	June 18, 1909	July 1, 1913	1,200
Bristol	6,247	Saml. Rhea McChesney	4	—— —, 1905	—— —, 1913	1,600
Charlottesville	6,765	James Gibson Johnson	4	June 17, 1909	July 1, 1913	1,500
Clifton Forge	5,748	J. G. Jeter				
Danville	19,020	Ford Henry Wheatley	4	Sept. 17, 1908	July 1, 1913	2,075
Fredericksburg	5,874	Hugh S. Bird				

[1] Supervisor of grades.

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population, census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
VIRGINIA—contd						
Hampton	5,505	John M. Willis				
Harrisonburg	4,879	Wm. Hampton Keister	1	June —, 1894	June —, 1912	$1,900
Lynchburg	29,494	Edward C. Glass	4	—— —, 1879	—— —, 1913	2,725
Newport News	20,205	Willis A. Jenkins	4	July 1, 1909	July 1, 1913	2,000
Norfolk	67,452	Richard Augustus Dobie	4	Jan. —, 1896	July —, 1913	2,830
Petersburg	24,127	Robert Randolph Jones	4	Mar. —, 1908	June 30, 1913	2,000
Portsmouth	33,190	Harry A. Hunt	4	July 1, 1909	July 1, 1913	1,700
Pulaski	4,807	Edward L. Darst				
Radford	4,202	L. D. Keadle				
Richmond	127,628	J. A. C. Chandler	4	July 1, 1909	July 1, 1913	3,000
Roanoke	34,874	Harris Hart	4	May —, 1893	.....do	2,500
Staunton	10,604	John P. Neff	4	June —, 1909	.....do	1,800
Suffolk	7,008	Lee Britt				
Winchester	5,864	Maurice M. Lynch	4	Apr. —, 1886	June 30, 1913	975
WASHINGTON.						
Aberdeen	13,660	Arthur Wilson	1	July —, 1908	June 30, 1912	2,400
Bellingham	24,298	Elmer Lafayette Cave	3	July 1, 1909	July 1, 1913	3,000
Centralia	7,311	Ray Burdette Kellogg	1	July 1, 1907	June 30, 1912	2,000
Everett	24,814	Charles R. Frazier	1	—— —, 1910	July 1, 1912	3,500
Hoquiam	8,171	E. L. McDonnell				
North Yakima	14,082	Wellington De Forte Sterling.	1	May 31, 1911	Aug. 1, 1912	2,400
Olympia	6,996	Chauncy Edwin Beach	2	May —, 1909	June 30, 1912	2,000
Seattle	237,194	Frank B. Cooper	3	—— —, 1891	—— —, 1912	6,500
Spokane	104,402	Bruce M. Watson	2	Mar. 7, 1908	July 1, 1913	4,000
Tacoma	83,743	Jacob Grant Collicott	2	July 1, 1910	July —, 1912	4,000
Vancouver	9,300	Charles W. Shumway	1	July 1, 1895	June 30, 1912	2,000
Walla Walla	19,364	Orrin S. Jones	2	July —, 1904	July 1, 1912	2,600
WEST VIRGINIA.						
Benwood	4,976	H. L. Pedicord				
Bluefield	11,188	H. E. Cooper	1	July 3, 1911	May 22, 1912	1,600
Charleston	22,996	George Summers Laidley	2	—— —, 1878	July 1, 1913	3,000
Clarksburg	9,201	Frank Lee Burdette	1	Aug. —, 1897	June 30, 1911	1,800
Elkins	5,260	Otis G. Wilson	1	Sept. —, 1908	July 1, 1911	1,800
Fairmont	9,711	Joseph Rosier	1	June —, 1900	June 30, 1912	2,000
Grafton	7,563	M. M. Brooks				
Huntington	31,161	Wilson Matthews Foulk	1	June 20, 1905	June 30, 1912	2,500
Martinsburg	10,698	William C. Morton	3	Aug. 1, 1909	Aug. 1, 1912	1,500
Morgantown	9,150	George Morgan Evans	1	Aug. —, 1908	June 30, 1912	2,100
Moundsville	8,918	George Emanuel Hubbs	1	July 1, 1909	June 30, 1911	1,500
Parkersburg	17,842	Ira Benton Bush	1	July 1, 1910	July 1, 1912	2,200
Wellsburg	4,189	Forrest Baker Bryant	1	.....do	.....do	2,000
Wheeling	41,641	Hervey Black Work	2	Oct. 20, 1904	July —, 1911	2,500
WISCONSIN.						
Antigo	7,196	William Henry Hickok	1	Sept. 1, 1904	July 1, 1912	2,000
Appleton	16,773	Carrie Emma Morgan	3	—— —, 1894	.....do	950
Ashland	11,594	J. F. Wilson				
Baraboo	6,324	A. C Kingsford	1	June —, 1910	June —, 1912	1,900
Beaver Dam	6,758	Lester R. Creutz	1	Aug. —, 1910	June —, 1912	1,650
Beloit	15,125	Frank Elmer Converse	1	Aug. —, 1897	Aug. 1, 1912	2,300
Berlin	4,636	William Tait Anderson	1	May 1, 1909	June 30, 1912	1,750
Chippewa Falls	8,893	George W. Swartz				
De Pere: East side	4,477	Charles C. Bishop	1	June —, 1908	June 16, 1912	1,400
De Pere: West side		Harley Wesley Lyon	1	Apr. —, 1911	June —, 1912	1,100
Eau Claire	18,310	W. H. Schultz				
Fond du Lac	18,797	Guy D. Smith	3	July 1, 1910	June 30, 1914	2,500
Grand Rapids	6,521	Charles Wm. Schwede	1	July —, 1909	June 30, 1912	1,900
Green Bay	25,236	A. W. Burton	3	—— —, 1900	Aug. —, 1912	2,000
Janesville	13,894	Harry C. Buell	1	Aug. 1, 1901	Aug. 1, 1912	2,500
Kaukauna	4,717	Leslie Paul Bunker	1	Aug. —, 1908	Aug. 15, 1911	1,600
Kenosha	21,371	Mrs. Mary Davison Bradford.	3	May —, 1910	June —, 1913	2,200
La Crosse	30,417	Louis Paul Benezet	1	July 5, 1911	July 1, 1912	2,400
Madison	25,531	Richard B. Dudgeon	1	July 1, 1891	June 30, 1912	2,500
Manitowoc	13,027	P. J. Zimmers	3	Apr. —, 1910	July —, 1914	2,700
Marinette	14,610	George Henry Landgraf	3	July 1, 1903	June 30, 1913	2,800
Marshfield	5,783	Carl William Otto	2	May —, 1910	June 16, 1911	1,700
Menasha	6,081	John Callahan	1	June 3, 1901	June 30, 1912	2,000
Menominee	5,036	Fred Thomson	1	May —, 1911	.....do	2,000
Merrill	8,089	William Milne	1	July 1, 1910	July 1, 1911	1,700
Milwaukee	373,857	Carroll Gardner Pearse	3	Apr. 1, 1904	June 30, 1913	6,000

II.—Superintendents in Cities and Towns of 4,000 Population and Over—Con.

City.	Population census of 1910.	Superintendent.	Term of office in years.	Date of original appointment.	Expiration of present term.	Salary per annum.
WISCONSIN—con.						
Monroe	4,410	George B. Haverson				
Neenah	5,734	Ed. Monroe Beeman	2	July —, 1903	June 30, 1912	$2,200
Oconto	5,629	Milton Ritchie Stanley	1	June —, 1908	Sept. —, 1912	1,860
Oshkosh	33,062	Matthew N. MacIver	1	July 1, 1906	June 30, 1912	2,600
Portage	5,440	W. G. Clough	1	July 1, 1876	.....do.....	1,700
Racine	38,002	Burton E. Nelson	3	Aug. 1, 1904	Aug. 1, 1914	2,800
Rhinelander	5,637	Fredk. Arthur Harrison	1	July 1, 1908	July 1, 1912	1,900
Sheboygan	26,398	Henry F. Leverenz	1	Apr. 1, 1899	Apr. 15, 1912	2,350
South Milwaukee	6,092	Fred W. Hein	3	Sept. 1, 1909	Aug. 1, 1913	1,800
Stevens Point	8,692	Junius Everett Roberts	1	May —, 1911	—— —, 1912	1,800
Stoughton	4,761	George Orton Banting	3	June —, 1906	June 30, 1912	1,900
Sturgeon Bay	4,262	Rudolph Soukup	1	May —, 1911	June 16, 1912	1,350
Superior	40,384	William E. Maddock	3	July 1, 1905	July 1, 1912	2,600
Two Rivers	4,850	William Jas. Hamilton	1	June —, 1907	June 30, 1912	2,000
Watertown	8,829	Thomas J. Berto				
Waukesha	8,740	G. F. Loomis	3	June —, 1908	June —, 1914	2,250
Wausau	16,560	Silas B. Tobey	1	July 1, 1905	July 1, 1912	2,750
West Allis	6,645	Thomas J. Jones	3	—— —, 1907	June 30, 1913	2,000
WYOMING.						
Cheyenne	11,320	Steven Sanford Stockwell.	1	July 10, 1905	July 10, 1912	2,250
Laramie	8,237	Ira B. Fee	1	Sept. 1, 1910	Sept. 1, 1911	2,000
Rawlins	4,256	M. E. Shuck				
Rock Springs	5,778	Oscar J. Blakesley	1	—— —, 1906	June 1, 1912	2,000
Sheridan	8,408	John Jacob Early	1	Aug. 1, 1908	Aug. 1, 1911	2,400

III.—University and College Presidents.

Location.	University or college.	Name of president.
ALABAMA.		
Athens	Athens Female College	Miss Mary N. Moore.
Auburn	Alabama Polytechnic Institute	Charles C. Thach, LL. D.
Eastlake	Howard College	A. P. Montague, LL. D.
Eufaula	Alabama Brenau College	Thos. G. Wilkinson.
Greensboro	Southern University	Andrew Sledd, LL. D.
Marion	Judson College	Rev. Robert G. Patrick, D. D.
Montgomery	Woman's College of Alabama	William E. Martin, Ph. D.
St. Bernard	St. Bernard College	Rev. Bernard Menges, O. S. B.
Spring Hill	Spring Hill College	Rev. Francis X. Twellmeyer, S. J.
Talladega	Alabama Synodical College for Women	Rev. T. Peyton Walton.
Tuscaloosa	Central Female College	Rev. B. F. Giles, A. M.
Do	Tuscaloosa Female College	R. J. Holston, A. M.
University	University of Alabama	George H. Denny, LL. D.
ARIZONA.		
Tucson	University of Arizona	Arthur H. Wilde, Ph. D.
ARKANSAS.		
Arkadelphia	Henderson-Brown College	Geo. H. Crowell.
Do	Ouachita College	Robert G. Bowers, D. D.
Batesville	Arkansas College	Eugene R. Long, Ph. D.
Clarksville	Arkansas Cumberland College	E. E. Morris, D. D.
Conway	Central Baptist College	W. W. Rivers, A. M.
Do	Hendrix College	Rev. A. C. Millar, D. D.
Fayetteville	University of Arkansas	John N. Tillman, LL. D.
Little Rock	Philander Smith College (colored)	Rev. J. M. Cox, D. D.
CALIFORNIA.		
Berkeley	University of California	Benj. Ide Wheeler, LL. D.
Claremont	Pomona College	James A. Blaisdell, M. A.
Los Angeles	Occidental College	John W. Baer, LL. D.
Do	St. Vincents College	Rev. J. S Glass, C. M., D. D.
Do	University of Southern California	Rev. George F. Bovard, LL. D.
Mills College	Mills College	Luella Clay Carson, LL. D.
Oakland	St. Mary's College	Rev. Brother Vellesian, F. S. C.
Pasadena	Throop Polytechnic Institute	James A. B. Scherer, LL. D.
San Francisco	St. Ignatius College	Rev. Joseph C. Sasia, S. J.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
CALIFORNIA—contd.		
San Jose	College of the Pacific	Wm. W. Guth, Ph. D.
Santa Clara	Santa Clara College	Rev. James P. Morrissey, S. J.
Stanford University	Leland Stanford Junior University	David Starr Jordan, LL. D.
Whittier	Whittier College	Thomas Newlin, Ph. M.
COLORADO.		
Boulder	University of Colorado	James H. Baker, LL. D.
Colorado Springs	Colorado College	Rev. W. F. Slocum, LL. D.
Denver	College of the Sacred Heart	Rev. J. J. Brown, S. J.
Fort Collins	Colorado Agricultural College	Chas. A. Lory, M. S.
Golden	State School of Mines	Victor C. Alderson, Sc. D.
Montclaire	Colorado Woman's College	J. P. Treat, A. M.
University Park	University of Denver	Rev. Henry A Buchtel, LL. D., chancellor.
Westminster	Westminster University	Salem G. Pattison, M. A.
CONNECTICUT.		
Hartford	Trinity College	Flavel S. Luther, LL. D.
Middletown	Wesleyan University	Rev. W. A. Shanklin, LL. D.
New Haven	Yale University	Arthur T. Hadley, LL. D.
Storrs	Connecticut Agricultural College	C. H. Beach, B. S.
DELAWARE.		
Newark	Delaware College	Geo. A. Harter, Ph. D.
DISTRICT OF COLUMBIA.		
Washington	Catholic University of America	Rev. Thomas J. Shahan, S. T. D., rector.
Do	Gallaudet College	Percival Hall, M. A.
Do	Georgetown University	Rev. Joseph Himmel, S. J.
Do	George Washington University	Charles H. Stockton, LL. D.
Do	Howard University (colored)	Rev. Wilbur P. Thirkield, LL. D.
Do	St. John's College	Brother F. Andrew, F. S. C.
Do	Trinity College	Sister Julia, S. N. D.
Do	Washington Christian College	Daniel E. Motley, Ph. D.
FLORIDA.		
Deland	John B. Stetson University	Lincoln Hulley, LL. D.
Gainesville	University of Florida	Albert A. Murhree, LL. D.
Sutherland	Southern College	Rev. J. P. Hillburn, D. D.
Tallahassee	Florida State College for Women	Edward Conradi, Ph. D.
Winter Park	Rollins College	Rev. Wm. F. Blackman, LL. D.
GEORGIA.		
Athens	Lucy Cobb Institute	Susan G. Gerdine.
Do	University of Georgia	David C. Barrow, LL. D., chancellor.
Atlanta	Atlanta Baptist College (colored)	John Hope, A. M.
Do	Atlanta University (colored)	Edward T. Ware, A. B.
Do	Georgia School of Technology	Kenneth G. Matheson, LL. D.
Do	Morris Brown College (colored)	Rev. William A. Fountain, S. T. B.
Bowdon	Bowdon College	V. D. Whatley, A. M.
College Park	Cox College	W. S. Cox.
Cuthbert	Andrew College	J. W. Malone, A. M.
Dahlonega	North Georgia Agricultural College	G. R. Glenn, LL. D.
Decatur	Agnes Scott College	Rev. F. H. Gaines, D. D.
Demorest	Piedmont College	Rev. Frank E. Jenkins, D. D.
Forsyth	Bessie Tift College	C. H. S. Jackson, A. M.
Gainesville	Brenau College	H. J. Pearce, Ph. D.
Lagrange	Lagrange Female College	Rufus W. Smith, A. M.
Do	Southern Female College	W. F. Brown.
Macon	Mercer University	Samuel Y. Jameson.
Do	Wesleyan Female College	Rev. Wm. N. Ainsworth, D. D.
Oxford	Emory College	Rev. J. F. Dickey, D. D.
Rome	Shorter College	A. W. Van Hoose.
South Atlanta	Clark University (colored)	S. E. Idleman, A. M.
Wrightsville	Warthen College	A. F. Ware.
HAWAII.		
Honolulu	College of Hawaii	John W. Gilmore, M. S. A.
IDAHO.		
Caldwell	College of Idaho	Rev. William J. Boone, D. D.
Moscow	University of Idaho	James A. MacLean, LL. D.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
ILLINOIS.		
Abingdon	Hedding College	Walter D. Agnew.
Aledo	William and Vashti College	Rev. Frank E. English, D. D.
Bloomington	Illinois Wesleyan University	Rev. Theodore Kemp, D. D.
Bourbonnais	St. Viateur's College	Rev. John P. O'Mahoney, C. S. V.
Carlinville	Blackburn College	Walter H. Bradley, acting.
Carthage	Carthage College	Rev. H. D. Hoover, Ph. D.
Chicago	Armour Institute of Technology	Rev. Frank W. Gunsaulus, LL. D.
Do	Lewis Institute	George N. Carman, A. M., director.
Do	Loyola University	Rev. Alexander J. Burrowes, S. J.
Do	St. Stanislaus College	Rev. L. J. Zapala, C. R., M. A.
Do	University of Chicago	Harry Pratt Judson, LL. D.
Decatur	James Millikin University	A. R. Taylor, LL. D.
Eureka	Eureka College	Alexander C. Gray, A. M., acting.
Evanston	Northwestern University	Abram W. Harris, LL. D.
Ewing	Ewing College	Rev. Wm. A. Matthews, D. D.
Galesburg	Knox College	Rev. Thomas McClelland, D. D.
Do	Lombard College	Rev. Lewis B. Fisher, LL. D.
Greenville	Greenville College	Eldon Grant Burritt, A. M.
Jacksonville	Illinois College	Charles H. Rammelkamp, Ph. D.
Do	Illinois Woman's College	Rev. Joseph R. Harker, Ph. D.
Knoxville	St. Mary's School	Rev. C. W. Leffingwell, D. D., rector.
Lake Forest	Lake Forest College	John S. Nollen, Ph. D.
Lebanon	McKendree College	Rev. John F. Harmon, D. D.
Lincoln	Lincoln College	J. H. McMurray, A. M.
Monmouth	Monmouth College	Rev. Thos. H. McMichael, D. D.
Naperville	Northwestern College	Rev. Thomas Bowman, D. D.
Quincy	St. Francis Solanus College	Rev. Fortunatus Hausser, O. F. M.
Rockford	Rockford College	Julia H. Gulliver, Ph. D.
Rock Island	Augustana College	Gustav A. Andreen, Ph. D.
Upper Alton	Shurtleff College	
Urbana	University of Illinois	Edmund J. James, LL. D.
Wheaton	Wheaton College	Rev. C. A. Blanchard, D. D.
INDIANA.		
Bloomington	Indiana University	William L. Bryan, LL. D.
Collegeville	St. Joseph's College	Rev. Augustine Seifert, C. PP. S.
Crawfordsville	Wabash College	Rev. Geo. Lewes Mackintosh, D. D.
Earlham	Earlham College	Robert L. Kelly, LL. D.
Fort Wayne	Concordia College	Rev. Martin Luecke.
Franklin	Franklin College	Elijah A. Hanley, D. D.
Goshen	Goshen College	Noah E. Byers, A. M.
Greencastle	De Pauw University	Rev. Francis J. McConnell, LL. D.
Hanover	Hanover College	William A. Millis, LL. D.
Indianapolis	Butler College	Thomas C. Howe, Ph. D.
Lafayette	Purdue University	W. E. Stone, LL. D.
Merom	Union Christian College	Rev. Daniel A. Long, LL. D.
Moores Hill	Moores Hill College	Rev. Harry A. King, S. T. B.
Notre Dame	St. Mary's College and Academy	Mother M. Pauline.
Do	University of Notre Dame	Rev. John Cavanaugh, C.S.C., D.D.
Oakland City	Oakland City College	Wm. P. Dearing.
St. Meinrad	St. Meinrad College	Rev. A. Schmitt, O. S. B.
Terre Haute	Rose Polytechnic Institute	Carl L. Mees, Ph. D.
Upland	Taylor University	Rev. Monroe Vayhinger, D. D.
Valparaiso	Valparaiso University	H. B. Brown.
Vincennes	Vincennes University	Horace Ellis, Ph. D.
IOWA.		
Ames	Iowa State College of Agriculture and Mechanic Arts.	E. W. Stanton, LL. D., acting.
Cedar Falls	Iowa State Teachers College	Homer H. Seerley, LL. D.
Cedar Rapids	Coe College	Rev. J. A. Marquis, LL. D.
Charles City	Charles City College	Rev. Frederick Schaub, D. D., acting.
Clinton	Wartburg College	John Fritschel.
College Springs	Amity College	Robert A. McConagha.
Decorah	Luther College	Rev. C. K. Preus.
Des Moines	Des Moines College	John A. Earle, D. D.
Do	Drake University	Hill M. Bell, LL. D.
Dubuque	St. Joseph's College	Very Rev. Daniel M. Gorman, LL. D.
Fairfield	Parsons College	Rev. W. E. Parsons, D. D.
Fayette	Upper Iowa University	Richard W. Cooper, Litt. D.
Grinnell	Grinnell College	J. H. T. Main, LL. D.
Hopkinton	Lenox College	Rev. E. E. Reed, D. D.
Indianola	Simpson College	Francis L. Strickland, Ph. D.
Iowa City	State University of Iowa	John G. Bowman, M. A.
Iowa Falls	Ellsworth College	Ida F. Meyer, A. M.
Lamoni	Graceland College	J. A. Gunsolley, B. S., acting.
Legrand	Palmer College	Ercy C. Kerr, A. M.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
IOWA—continued.		
Mount Pleasant	Iowa Wesleyan College	Rev. Edwin A. Schell, D. D.
Mount Vernon	Cornell College	James E. Harlan, LL. D.
Oskaloosa	Penn College	David M. Edwards, Ph. D.
Pella	Central University of Iowa	John L. Beyl, Ph. D.
Sioux City	Morningside College	Rev. Alfred E. Craig.
Storm Lake	Buena Vista College	Rev. James P. Linn.
Tabor	Tabor College	Rev. Frederick W. Long, D. D.
Toledo	Leander Clark College	Rev. Franklin E. Brooke, D. D.
University Park	Central Holiness University	Rev. George A. McLaughlin, D. D.
KANSAS.		
Atchison	Midland College	Rev. Millard F. Troxell, D. D.
Do	St. Benedict's College	Rt. Rev. I. Wolf, O. S. B., D. D.
Baldwin	Baker University	Wilbur N. Mason.
Emporia	College of Emporia	Rev. Henry Coe Culbertson, D. D.
Highland	Highland College	Wm. C. T. Adams, Ph. D.
Holton	Campbell College	T. D. Crites.
Kansas City	Kansas City University	Rev. D. S. Stephens, D. D., chancellor.
Lawrence	University of Kansas	Frank Strong, LL. D.
Lincoln	Kansas Christian College	C. G. Nelson, M. A.
Lindsborg	Bethany College	Rev. Ernst F. Pihlblad, D. D.
McPherson	McPherson College	John A. Clement, Ph. D.
Manhattan	Kansas State Agricultural College	Henry J. Waters, B. S. A.
Ottawa	Ottawa University	S. E. Price.
St. Marys	St. Mary's College	Rev. Aloysius A. Breen, S. J.
Salina	Kansas Wesleyan University	R. P. Smith.
Sterling	Cooper College	Rev. R. T. Campbell, D. D.
Topeka	College of the Sisters of Bethany	Rev. F. R. Millspaugh, D. D.
Do	Washburn College	Rev. Frank K. Sanders, D. D.
Wichita	Fairmount College	Rev. Henry E. Thayer, D. D.
Do	Friends University	Edmund Stanley, A. M.
Winfield	Southwestern Kansas College	Rev. F. E. Mossman, D. D.
KENTUCKY.		
Berea	Berea College	Rev. Wm. G. Frost, Ph. D.
Bowling Green	Ogden College	Alvin F. Lewis, Ph. D.
Danville	Caldwell College	John C. Acheson, A. M.
Do	Central University of Kentucky	Frederick W. Hinitt, Ph. D.
Georgetown	Georgetown College	Arthur Yager, LL. D.
Glasgow	Liberty College	Robert E. Hatton, Ph. D.
Harrodsburg	Beaumont College	Thomas Smith, A. M.
Hopkinsville	Bethel Female College	Harry G. Brownell, B. S.
Do	McLean College	A. C. Kuykendall, A. B.
Lexington	Hamilton College for Women	H. G. Shearin, Ph. D.
Do	Sayre College	Rev. J. M. Spencer.
Do	State University	Henry S. Barker, LL. D.
Do	Transylvania University	Richard H. Crossfield, Ph. D.
Louisville	University of Louisville	John Patterson, LL. D.
Lyndon	Kentucky Military Institute	C. W. Fowler, C. E.
Owensboro	Owensboro Female College	J. Byron La Rue.
Russellville	Bethel College	Floran D. Perkins, A. B.
Do	Logan Female College	J. W. Repass, D. D.
St. Mary	St. Mary's College	Rev. Michael Jaglowicz, C. R.
Versailles	Margaret College	Rev. James M. Maxon, M. A.
Winchester	Kentucky Wesleyan College	Rev. J. L. Clark.
LOUISIANA.		
Baton Rouge	Louisiana State University and Agricultural and Mechanical College.	Thomas D. Boyd, LL. D.
Clinton	Silliman Collegiate Institute	Rev. H. H. Brownlee.
Convent	Jefferson College	Rev. R. H. Smith, S. M.
Mansfield	Mansfield Female College	A. B. Peters.
New Orleans	H. Sophie Newcomb Memorial College	Brandt V. B. Dixon, LL. D.
Do	Leland University (colored)	R. W. Perkins, Ph. D.
Do	Loyola University	Rev. Albert Biever, S. J.
Do	New Orleans University (colored)	Rev. Charles M. Melden, D. D.
Do	Tulane University of Louisiana	E. B. Craighead, LL. D.
MAINE.		
Brunswick	Bowdoin College	Rev. Wm. De Witt Hyde, LL. D.
Lewiston	Bates College	Rev. G. C. Chase, LL. D.
Orono	University of Maine	Richard J. Aley, LL. D.
Van Buren	Van Buren College (St. Mary's)	Rev. Matthew Thouvenin, S. M.
Waterville	Colby College	Arthur J. Roberts, A. M.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
MARYLAND.		
Annapolis	St. John's College	Thomas Fell, LL. D.
Do	United States Naval Academy	Capt. John H. Gibbons, U. S. N., superintendent.
Baltimore	Goucher College	James B. Van Meter, acting.
Do	Johns Hopkins University	Ira Remsen, LL. D.
Do	Loyola College	
Do	Morgan College (colored)	Rev. John O. Spencer, Ph. D.
Do	Mount St. Joseph's College	Brother Norbert, director.
Chestertown	Washington College	James W. Cain, LL. D.
College Park	Maryland Agricultuial College	R. W. Silvester, LL. D.
Ellicott City	Rock Hill College	Rev. Brother Maurice, F. S. C.
Emmitsburg	Mount St. Mary's College	Rev. Bernard J. Bradley.
Frederick	Woman's College	J. H. Apple, A. M.
Lutherville	Maryland College for Women	Rev. Chas. W. Gallagher, D. D.
New Windsor	New Windsor College	Rev. James Fraser, LL. D.
Westminster	Western Maryland College	Rev. Thomas H. Lewis, LL. D.
MASSACHUSETTS.		
Amherst	Amherst College	Rev. George Harris, LL. D.
Do	Massachusetts Agricultural College	K. L. Butterfield, A. M.
Auburndale	Lasell Seminary for Young Women	G. M. Winslow, Ph. D., principal.
Boston	Boston College	Rev. Thomas I. Gasson, S. J.
Do	Boston University	Rev. Lemuel H. Murlin, D. D.
Do	Massachusetts Institute of Technology	Richard C. Maclaurin, LL. D.
Do	Simmons College	Henry Lefavour, LL. D.
Cambridge	Harvard University	Abbott Lawrence Lowell, LL. D.
Do	Radcliffe College	Le Baron R. Briggs, LL. D.
Northampton	Smith College	Rev. Marion Le Roy Burton, Ph. D.
South Hadley	Mount Holyoke College	Mary E. Woolley, LL. D.
Tufts College	Tufts College	Frederick W. Hamilton, LL. D.
Wellesley	Wellesley College	Ellen F. Pendleton, M. A.
Williamstown	Williams College	Harry A. Garfield, LL. D.
Worcester	Clark University	G. Stanley Hall, LL. D.
Do	Clark College	Edmund Clark Sanford, Ph. D.
Do	College of the Holy Cross	Rev. Joseph N. Dinand, S. J.
Do	Worcester Polytechnic Institute	Edmund A. Engler, LL. D.
MICHIGAN.		
Adrian	Adrian College	Rev. B. W. Anthony, LL. D.
Albion	Albion College	Samuel Dickie, LL. D.
Alma	Alma College	Rev. August F. Bruske, LL. D.
Ann Arbor	University of Michigan	Harry B. Hutchins, LL. D.
Detroit	University of Detroit	Rev. Richard D. Slevin, S. J.
East Lansing	Michigan Agricultural College	J. L. Snyder, Ph. D.
Hillsdale	Hillsdale College	Joseph W. Mauck, LL. D.
Holland	Hope College	Gerrit J. Kollen, LL. D.
Houghton	Michigan College of Mines	F. W. McNair, Sc. D.
Kalamazoo	Kalamazoo College	A. G. Slocum, LL. D.
Olivet	Olivet College	E. G. Lancaster, Ph. D.
MINNESOTA.		
Albert Lea	Albert Lea College	Anna B. Kiermeier, acting dean.
Collegeville	St. John's University	Rev. Peter Engel, O. S. B., Ph. D.
Minneapolis	Augsburg Seminary	Sven Oftedal.
Do	University of Minnesota	George E. Vincent, LL. D.
Northfield	Carleton College	Donald J. Cowling, Ph. D.
Do	St. Olaf College	Rev. John N. Kildahl.
St. Paul	Hamline University	Rev. Geo. H. Bridgman, LL. D.
Do	Macalester College	Thomas M. Hodgman, LL. D.
St. Peter	Gustavus Adolphus College	Rev. Jacob P. Uhler, Ph. D.
MISSISSIPPI.		
Agricultural College	Mississippi Agricultural and Mechanical College.	J. C. Hardy, LL. D.
Blue Mountain	Blue Mountain Female College	W. J. Lowrey, A. M.
Brookhaven	Whitworth Female College	Rev. I. W. Cooper, D. D.
Clinton	Hillman College	Rev. W. T. Lowrey, D. D.
Do	Mississippi College	John W. Provine, Ph. D.
Columbus	Industrial Institute and College	Henry L. Whitfield.
French Camp	Central Mississippi Institute	J. A. Sanderson, principal.
Holly Springs	Rust University (colored)	Rev. James T. Docking.
Jackson	Bellhaven College for Young Ladies	J. R. Preston.
Do	Millsaps College	David C. Hull, M. S.
Meridian	Meridian Male College	Malcomb A. Beeson, B. S.
Do	Meridian Woman'S College	J. W. Beeson, A. M.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
MISSISSIPPI—contd.		
Pontotoc	Chickasaw Female College	Miss Katherine E. Crawford.
Port Gibson	Port Gibson Female College	Henry G. Hawkins, A. B.
University	University of Mississippi	A. A. Kincannon, LL. D., chancellor.
MISSOURI.		
Bowling Green	Pike College	Lula M. Collmis.
Cameron	Missouri Wesleyan College	H. R. De Bra.
Canton	Christian University	Carl Johann, LL. D.
Clarksburg	Clarksburg College	Benj. M. Shacklette, A. M.
Cloumbia	Christian College	Mrs. W. T. Moore.
Do	Stephens College	Rev. T. E. Quisenberry.
Do	University of Missouri	Albert Ross Hill, LL. D.
Fayette	Central College	William A. Webb, A. B.
Do	Howard Payne College	Rev. Henry E. Stout.
Fulton	Westminster College	Rev. Charles D. Boving, D. D.
Do	Synodical Female College	Mary Lee Allison.
Glasgow	Pritchett College	Uriel S. Hall, A. B.
Lagrange	Lagrange College	Rev. Ranson Harvey, D. D.
Lexington	Central Female College	Z. M. Williams, A. M.
Do	Lexington College for Young Women	C. Lewis Fowler.
Liberty	Liberty Ladies' College	H. H. Savage, A. M.
Do	William Jewell College	Rev. J. P. Greene, LL. D.
Marshall	Missouri Valley College	Rev. Wm. H. Black, LL. D.
Mexico	Hardin College	J. W. Million, A. M.
Morrisville	Scarritt-Morrisville College	Rev. Louis C. Perry, A. M.
Nevada	Cottey College for Young Ladies	Mrs. V. A. C. Stockard.
Odessa	Western Bible and Literary College	R. N. Gardner, B. S.
Parkville	Park College	L. M. McAfee, LL. D.
St. Charles	Lindenwood College for Women	Rev. George F. Ayres, Ph. D.
St. Louis	Christian Brothers College	Brother Lawrence Sixtus.
Do	Forest Park University	Mrs. Anna Snead Cairns.
Do	St. Louis University	Rev. John P. Frieden, S. J.
Do	Washington University	David F. Houston, LL. D., chancellor.
Springfield	Drury College	Rev. Joseph H. George, D. D.
Tarkio	Tarkio College	Rev. J. A. Thompson, D. D.
Warrenton	Central Wesleyan College	Rev. Otto E. Kriege, D. D.
MONTANA.		
Bozeman	Montana College of Agriculture and Mechanic Arts.	James M. Hamilton, M. S.
Butte	Montana State School of Mines	Charles H. Bowman, M. S.
Missoula	University of Montana	C. A. Duniway, Ph. D.
NEBRASKA.		
Bellevue	Bellevue College	Stephen W. Stookey, LL. D.
Bethany	Cotner University	William Oeschger, B. D.
College View	Union College	Frederick Griggs.
Crete	Doane College	Rev. David B. Perry, D. D.
Grand Island	Grand Island College	L. A. Garrison.
Hastings	Hastings College	Archelaus E. Turner, LL. D.
Lincoln	University of Nebraska	Samuel Avery, LL. D., chancellor.
Omaha	Creighton University	Rev. Eugene A. Magevney.
Do	University of Omaha	Daniel E. Jenkins, Ph. D.
University Place	Nebraska Wesleyan University	Clark A. Fulmer, M. A.
York	York College	Rev. Wm. E. Schell, D. D.
NEVADA.		
Reno	State University of Nevada	Rev. J. E. Stubbs, LL. D.
NEW HAMPSHIRE.		
Durham	New Hampshire College of Agriculture and Mechanic Arts.	W. D. Gibbs, Sc. D.
Hanover	Dartmouth College	E. F. Nichols, LL. D.
Manchester	St. Anselm's College	Rt. Rev. Ernest Helmstetter, O. S. B.
NEW JERSEY.		
Convent Station	College of Saint Elizabeth	Sister M. Pauline Kelligher.
Hoboken	Stevens Institute of Technology	Alexander C. Humphreys, LL. D.
Jersey City	St. Peter's College	Rev. Edward J. Magrath, S. J.
Kenilworth	Upsala College	Rev. E. J. Sodegran.
New Brunswick	Rutgers College	Rev. Wm. H. S. Demarest, LL. D.
Princeton	Princeton University	John A. Stewart, A. M., acting.
South Orange	Seton Hall College	Very Rev. Jas. F. Mooney, LL. D.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
NEW MEXICO.		
Agricultural College	New Mexico College of Agriculture and Mechanic Arts.	W. E. Garrison, Ph. D.
Albuquerque	University of New Mexico	Edward McQueen Gray, Ph. D.
Socorro	New Mexico School of Mines	Emmet A. Drake, A. M.
NEW YORK.		
Alfred	Alfred University	Rev. B. C. Davis, D. D.
Annandale	St. Stephen's College	Rev. Wm. C. Rodgers, D. D.
Aurora	Wells College	Rev. Geo. M. Ward, LL. D.
Brooklyn	Adelphi College	C. H. Levermore, Ph. D.
Do	Polytechnic Institute of Brooklyn	F. W. Atkinson, Ph. D.
Do	St. Francis College	Brother David, O. S. F.
Do	St. John's College	Very Rev. John W. Moore, C. M.
Buffalo	Canisius College	Rev. Augustine A. Miller, S. J.
Canton	St. Lawrence University	Rev. Almon Gunnison, LL. D.
Clinton	Hamilton College	Rev. M. W. Stryker, LL. D.
Elmira	Elmira College	Rev. A. C. Mackenzie, LL. D.
Geneva	Hobart College	Rev. L. C. Stewardson, LL. D.
Hamilton	Colgate University	Elmer B. Bryan, LL. D.
Ithaca	Cornell University	J. G. Schurman, LL. D.
Keuka Park	Keuka College	Rev. Joseph A. Serena.
New Rochelle	College of New Rochelle	Rev. M. C. O'Farrell.
New York	Barnard College	Virginia C. Gildersleeve, Ph. D., dean.
Do	College of St. Francis Xavier	Rev. Thos. J. McCluskey, S. J.
Do	College of the City of New York	John H. Finley, LL. D.
Do	Columbia University	Nicholas M. Butler, LL. D.
Do	Fordham University	Rev. Daniel J. Quinn, S. J.
Do	Manhattan College	Rev. Brother Jerome, F. S. C.
Do	New York University	Elmer Ellsworth Brown, LL. D., chancellor.
Do	Normal College of the City of New York	George S. Davis, LL. D.
Do	Teachers College	James E. Russell, LL. D., dean.
Niagara University	Niagara University	Very Rev. Edward J. Walsh, C. M.
Potsdam	Clarkson School of Technology	John P. Brooks, M. E., director.
Poughkeepsie	Vassar College	Rev. J. M. Taylor, LL. D.
Rochester	University of Rochester	Rev. Benj. Rush Rhees, LL. D.
St. Bonaventure	St. Bonaventure's College	Rev. Fidelis J. Reynolds, O. F. M.
Schenectady	Union University	Rev. Charles A. Richmond, D. D.
Syracuse	Syracuse University	Rev. J. R. Day, LL. D., chancellor.
Troy	Rensselaer Polytechnic Institute	Palmer C. Ricketts, C. E.
West Point	United States Military Academy	Maj. Gen Thomas H. Barry, supt.
NORTH CAROLINA.		
Belmont	St. Mary's College	Rev. Leo Haid, O. S. B., D. D.
Chapel Hill	University of North Carolina	F. P. Venable, LL. D.
Charlotte	Biddle University (colored)	H. L. McCrorey.
Do	Elizabeth College	Rev. C. B. King, D. D.
Davidson	Davidson College	Henry L. Smith, LL. D.
Durham	Trinity College	Wm. P. Few, Ph. D.
Elon College	Elon College	W. A. Harper, M. A.
Greensboro	Greensboro Female College	Mrs. Lucy H. Robertson.
Guilford College	Guilford College	L. Lyndon Hobbs, A. M.
Hickory	Lenoir College	Rev. R. L. Fritz, A. M.
Newton	Catawba College	John F. Buchheit, A. M.
Oxford	Oxford Female Seminary	F. P. Hobgood, A. M.
Raleigh	Meredith College	Rev. R. T. Vann, D. D.
Do	Peace Institute	Henry J. Stockard, A. M.
Do	St. Mary's School	Rev. George W. Lay.
Do	Shaw University (colored)	Chas. F. Meserve, LL. D.
Red Springs	Southern Presbyterian College	Rev. C. G. Vardell, D. D.
Salem	Salem Female Academy and College	Rev. Howard E. Rondthaler, A. M.
Salisbury	Livingstone College (colored)	Rev. William H. Goler, LL. D.
Wake Forest	Wake Forest College	Wm. L. Poteat, LL. D.
Weaverville	Weaverville College	Rev. L. B. Abernethy.
West Raleigh	North Carolina College of Agriculture and Mechanic Arts.	Daniel H. Hill, LL. D.
NORTH DAKOTA.		
Agricultural College	North Dakota Agricultural College	J. H. Worst, LL. D.
Fargo	Fargo College	Charles C. Creegan.
Grand Forks	Wesley College	Rev. Edward P. Robertson, D. D.
University	University of North Dakota	Frank L. McVey, Ph. D.
Ada	Ohio Northern University	Rev. Albert E. Smith, D. D.
Akron	Buchtel College	Rev. A. B. Church, LL. D.
Alliance	Mount Union College	Rev. W. H. McMaster, D. D.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
OHIO—continued.		
Ashland	Ashland College	W. D. Furry, Ph. D.
Athens	Ohio University	Alston Ellis, LL. D.
Berea	Baldwin University	Rev. Robert L. Waggoner, D. D.
Do	German Wallace College	Arthur L. Breslich, Ph. D., acting.
Cedarville	Cedarville College	Rev. David McKinney, LL. D.
Cincinnati	St. Xavier College	Rev. Joseph Grimmelsman, S. J.
Do	University of Cincinnati	Chas. W. Dabney, LL. D.
Cleveland	Case School of Applied Science	Charles S. Howe, Ph. D.
Do	St. Ignatius College	Rev. John B. Furay, S. J.
Do	Western Reserve University	Rev. C. F. Thwing, LL. D.
Columbus	Capital University	Rev. L. H. Schuh, Ph. D.
Do	Ohio State University	Rev. W. O. Thompson, LL. D.
Dayton	St. Mary's Institute	Rev. Bernard P. O'Reilly, S. M.
Defiance	Defiance College	P. W. McReynolds, A. M.
Delaware	Ohio Wesleyan University	Rev. Herbert Welch, LL. D.
Findlay	Findlay College	Rev. C. I. Brown, D. D.
Gambier	Kenyon College	Rev. Wm. F. Peirce, L. H. D.
Granville	Denison University	Rev. Emory W. Hunt, LL. D.
Hiram	Hiram College	Miner Lee Bates, A. M.
Lebanon	Lebanon University	Wallace E. Miller.
Marietta	Marietta College	Rev. Alfred T. Perry, D. D.
New Athens	Franklin College	A. M. Campbell.
New Concord	Muskingum College	Rev. J. K. Montgomery, D. D.
Oberlin	Oberlin College	Rev. Henry C. King, D. D.
Oxford	Miami University	R. W. Hughes, acting.
Do	Oxford College for Women	Jane Sherzer, Ph. D.
Do	Western College for Women	Rev. John G. Newman, D. D.
Painesville	Lake Erie College	Miss Vivian Blanche Small.
Rio Grande	Rio Grande College	Simeon H. Bing.
Springfield	Wittenberg College	Rev. Charles G. Heckert, D. D.
Tiffin	Heidelberg University	Rev. Charles E. Miller, D. D.
Toledo	St. John's University	Rev. Francis Heiermann, S. J.
Do	Toledo University	Charles A. Cockayne, Ph. D.
Westerville	Otterbein University	Walter G. Clippinger, B. D.
West Lafayette	West Lafayette College	Aubrey F. Hess.
Wilberforce	Wilberforce University (colored)	Wm. S. Scarborough, A. M.
Wilmington	Wilmington College	Rev. Albert J. Brown, D. D.
Wooster	University of Wooster	Rev. Louis E. Holden, LL. D.
Yellowsprings	Antioch College	S. D. Fess, LL. D.
OKLAHOMA.		
Kingfisher	Kingfisher College	Rev. Calvin B. Moody, D. D.
Norman	University of Oklahoma	Julien C. Monnet, acting.
Oklahoma City	Epworth University	Rev. Geo. H. Bradford, D. D., chancellor.
Stillwater	Oklahoma Agricultural and Mechanical College.	J. H. Connell, M. S.
Tulsa	Henry Kendall College	Rev. Frederick W. Hawley.
OREGON.		
Albany	Albany College	H. M. Crooks, A. B.
Corvallis	Oregon Agricultural College	W. J. Kerr, Sc. D.
Dallas	Dallas College	Rev. Abraham A. Winter.
Eugene	University of Oregon	Prince L. Campbell, A. B.
Forest Grove	Pacific University	Wm. N. Ferrin, LL. D.
McMinnville	McMinnville College	Leonard W. Riley, D. D.
Newberg	Pacific College	Levi T. Pennington, A. B.
Philomath	Philomath College	M. R. Drury, A. M.
Portland	Reed College	Wm. T. Foster, A. M.
Salem	Willamette University	Rev. Fletcher Homan, D. D.
PENNSYLVANIA.		
Allentown	Allentown College for Women	Rev. Wm. F. Curtis.
Do	Muhlenberg College	Rev. J. W. A. Haas, D. D.
Annville	Lebanon Valley College	Rev. Lawrence Keister, S. T. B.
Beatty	St. Vincent College	Rev. Leander Schnerr, O. S. B.
Beaver	Beaver College	LeRoy Weller, A. M.
Beaver Falls	Geneva College	Rev. William H. George, A. M.
Bethlehem	Moravian College	Rev. Aug. Schultze, L. H. D.
Blairsville	Blairsville College	Magnus C. Ihlseng, Ph. D.
Bryn Mawr	Bryn Mawr College	Miss M. Carey Thomas, LL. D.
Carlisle	Dickinson College	Rev. Eugene A. Noble, D. D.
Chambersburg	Wilson College	Anna J. McKeag.
Chester	Pennsylvania Military College	Col. C. E. Hyatt, C. E.
Collegeville	Ursinus College	Rev. A. Edwin Keigwin, D. D.
Easton	Lafayette College	Rev. E. D. Warfield, LL. D.
Gettysburg	Pennsylvania College	William A. Granville.
Greenville	Thiel College	Rev. C. Theodore Benze, D. D.
Grove City	Grove City College	Rev. I. C. Ketler, LL. D.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
PENNSYLVANIA—contd.		
Haverford	Haverford College	Isaac Sharpless, LL. D.
Huntingdon	Juniata College	Martin G. Brumbaugh, LL. D.
Lancaster	Franklin and Marshall College	Rev. Henry H. Appel, D. D.
Lewisburg	Bucknell University	John H. Harris, LL. D.
Lincoln University	Lincoln University (colored)	Rev. John B. Rendall, D. D.
Meadville	Allegheny College	Rev. Wm. H. Crawford, LL. D.
Mechanicsburg	Irving Female College	E. E. Campbell, Ph. D.
Myerstown	Albright College	John Francis Dunlap.
New Wilmington	Westminster College	Rev. Robert M. Russell, LL. D.
Philadelphia	Dropsie College	Cyrus Adler, Ph D.
Do	La Salle College	Brother D. Edward.
Do	Temple University	Russell H. Conwell, LL. D.
Do	University of Pennsylvania	Edgar Fahs Smith, LL.D., provost.
Pittsburgh	Pennsylvania College for Women	Rev. Henry D. Lindsay, D. D.
Do	Duquesne University of the Holy Ghost	Rev. M. A. Hehir, LL. D.
Do	University of Pittsburgh	Rev. S. B. McCormick, LL. D., chancellor.
Selinsgrove	Susquehanna University	Rev. Charles T. Aikens, D. D.
South Bethlehem	Lehigh University	Henry S. Drinker, LL. D.
State College	Pennsylvania State College	Edwin E. Sparks, LL. D.
Swarthmore	Swarthmore College	Joseph Swain, LL. D.
Villanova	Villanova College	Rev. L. A. Delurey, O. S. A., D. D.
Washington	Washington and Jefferson College	Rev. J. D. Moffat, LL. D.
Waynesburg	Waynesburg College	Rev. Wm. M. Hudson, D. D.
PORTO RICO.		
Rio Piedras	University of Porto Rico	Edwin G. Dexter, Ph. D.
RHODE ISLAND.		
Kingston	Rhode Island State College	Howard Edwards, LL. D.
Providence	Brown University	Rev. W. H. P. Faunce, LL. D.
SOUTH CAROLINA.		
Charleston	College of Charleston	Harrison Randolph, LL. D.
Do	South Carolina Military Academy	Col. O. J. Bond, A. M., supt.
Clemson College	Clemson Agricultural College	Walter M. Riggs, B. S.
Clinton	Presbyterian College of South Carolina	Rev. Davison McDowell Douglass, D. D.
Columbia	Allen University (colored)	Rev. Wm. D. Chappelle, D. D.
Do	Benedict College (colored)	Rev. B. W. Valentine, A. B.
Do	Columbia Female College	Rev. W. W. Daniel, D. D.
Do	College for Women	Miss Euphemia McClintock, A. B.
Do	University of South Carolina	S. C. Mitchell, LL. D.
Due West	Erskine College	James Strong Moffatt, D. D.
Do	Woman's College of Due West	Rev. R. L. Robinson.
Greenville	Chicora College	Rev. S. C. Byrd, D. D.
Do	Furman University	Rev. Edwin McNeil Poteat, LL. D.
Do	Greenville Female College	David M. Ramsey, D. D.
Greenwood	Lander Female College	Rev. John O. Willson, D. D.
Hartsville	Coker College for Women	Rev. Arthur J. Hall.
Newberry	Newberry College	Rev. John H. Harms, D. D.
Orangeburg	Claflin University (colored)	Rev. L. M. Dunton, LL. D.
Spartanburg	Converse College	Robert P. Pell, Litt. D.
Do	Wofford College	Henry N. Snyder, A. M.
Union	Clifford Seminary	B. G. Clifford, Ph. D.
SOUTH DAKOTA.		
Brookings	South Dakota Agricultural College	Robert L. Slagle, Ph. D.
Huron	Huron College	Rev. C. H. French, D. D.
Mitchell	Dakota Wesleyan University	Rev. Samuel F. Kerfoot, D. D.
Rapid City	State School of Mines	Charles H. Fulton, E. M.
Redfield	Redfield College	Noah C. Hirschy, Ph. D.
Vermilion	University of South Dakota	Franklin B. Gault, Ph. D.
Yankton	Yankton College	Rev. H. K. Warren, LL. D.
TENNESSEE.		
Bristol	King College	B. R. Smith, C. E.
Do	Sullins College	W. S. Neighbors.
Chattanooga	Chattanooga University	Rev. J. H. Race, D. D.
Clarksville	Southwestern Presbyterian University	Wm. Dinwiddie, A. M., chancellor.
Cumberland Gap	Lincoln Memorial University	George A. Hubbell, Ph. D.
Gallatin	Howard Female College	Walter A. Ingram.
Greeneville	Washington and Tusculum College	Rev. Chas. O. Gray, D. D.
Jackson	Memphis Conference Female Institute	Rev. A. B. Jones, LL. D.
Do	Union University	Rev. R. A. Kirnbrough.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
TENNESSEE—continued.		
Jefferson City	Carson and Newman College	Rev. M. D. Jeffries, D. D.
Knoxville	Knoxville College (colored)	Rev. R. W. McGranahan, D. D.
Do	University of Tennessee	Brown Ayres, LL. D.
Lebanon	Cumberland University	Winstead P. Bone, D. D.
McKenzie	Bethel College	N. J. Finney, A. M.
Maryville	Maryville College	Rev. Samuel T. Wilson, D. D.
Memphis	Christian Brothers College	Rev. Brother Edward, F. S. C.
Milligan	Milligan College	
Murfreesboro	Tennessee College	Geo. J. Burnett, A. M.
Nashville	Belmont College for Young Women	Rev. Ira Landrith, LL. D.
Do	Boscobel College	Mrs. J. O. Rust, principal.
Do	Fisk University (colored)	Geo. A. Gates, LL. D.
Do	Vanderbilt University	James H. Kirkland, LL. D., chancellor.
Do	Walden University (colored)	Rev. John A. Kumler, D. D.
Rogersville	Synodical Female College	Lawrence Rolfe, A. B.
Sewanee	University of the South	Wm. B. Hall, M. A., vice-chancellor.
Spencer	Burritt College	W. S. Graves, A. M.
TEXAS.		
Abilene	Simmons College	J. D. Sandefer.
Austin	St. Edward's College	Rev. John T. Boland, C. S. C.
Do	University of Texas	Sidney E. Mezes, Ph. D.
Belton	Baylor Female College	E. G. Townsend, acting.
Bonham	Carlton College	Rev. C. T. Carlton, A. B.
Brownwood	Howard Payne College	Robert H. Hamilton, A. M.
College Station	Agricultural and Mechanical College of Texas.	Robert T. Milner.
Fort Worth	Fort Worth University	Rev. William Fielder, D. D.
Do	Polytechnic College	F. P. Culver.
Do	Texas Christian University	Rev. F. D. Kershner, A. M.
Galveston	St. Mary's University	Rev. A. E. Otis, S. J.
Georgetown	Southwestern University	Robert S. Hyer, LL. D.
San Antonio	St. Louis College	Rev. Louis A. Tragesser, S. M.
Sherman	Austin College	Rev. Thomas S. Clyce, D. D.
Do	North Texas Female College	Mrs. Lucy A. Kidd-Key.
South Houston	Asgard College	Rev. J. L. Dickens, LL. D.
Tehuacana	Westminster College	Harry H. Price, A. M.
Waco	Baylor University	Samuel P. Brooks, LL. D.
Do	Paul Quinn College (colored)	
Waxahachie	Trinity University	Samuel Lee Hornbeak, LL. D.
UTAH.		
Logan	Agricultural College of Utah	John A. Widtsoe, Ph. D.
Salt Lake City	University of Utah	Joseph T. Kinsgbury, Sc. D.
VERMONT.		
Burlington	University of Vermont and State Agricultural College.	Rev Guy P. Benton, LL. D.
Middlebury	Middlebury College	Rev. John Martin Thomas, D. D.
Northfield	Norwich University	Charles H. Spooner, LL. D.
VIRGINIA.		
Abingdon	Martha Washington College	S. D. Long.
Do	Stonewall Jackson Institute	Rev. Dabney R. Carson.
Ashland	Randolph-Macon College	Robert E. Blackwell, LL. D.
Blacksburg	Virginia Agricultural and Mechanical College and Polytechnic Institute.	P. B. Barringer, LL. D.
Bridgewater	Bridgewater College	John S. Flory, Ph. D.
Bristol	Virginia Intermont College	J. T. Henderson, A. M.
Charlottesville	University of Virginia	E. A. Alderman, LL. D.
Danville	Roanoke Institute of Danville	John B. Brewer, A. M.
Emory	Emory and Henry College	Chas. C. Weaver, Ph. D.
Fredericksburg	Fredericksburg College	S. W. Somerville.
Hampden-Sidney	Hampden-Sidney College	Rev. Henry T. Graham, D. D.
Hollins	Hollins College	Miss Matty L. Cocke.
Lexington	Virginia Military Institute	Edward W. Nichols, supt.
Do	Washington and Lee University	
Lynchburg	Randolph-Macon Woman's College	W. W. Smith, LL. D.
Do	Virginia Christian College	S. T. Willis, Ph. D.
Manassas	Eastern College	Hervin U. Roop, LL. D.
Petersburg	Southern Female College	Arthur K. Davis, A. M.
Richmond	Richmond College	F. W. Boatwright, LL. D.
Do	Virginia Union University (colored)	Rev. George R. Hovey, D. D.
Do	Woman's College	Rev. James Nelson, LL. D.
Roanoke	Virginia College for Young Women	Miss Mattie P. Harris.

III.—University and College Presidents—Continued.

Location.	University or college.	Name of president.
VIRGINIA—continued.		
Salem	Roanoke College	Rev. John A. Morehead, D. D.
Sweet Briar	Sweet Briar College	Mary K. Benedict, Ph. D.
Williamsburg	College of William and Mary	L. G. Tyler, LL. D.
WASHINGTON.		
Pullman	State College of Washington	E. A. Bryan, LL. D.
Seattle	University of Washington	Thomas F. Kane, Ph. D.
Spokane	Gonzaga College	Rev. Louis Taelman, S. J.
Tacoma	University of Puget Sound	Julius Christian Zeller, D. C. L.
Do	Whitworth College	Rev. D. R. Kerr, Ph. D.
Walla Walla	Whitman College	Rev. S. B. L. Penrose, D. D.
WEST VIRGINIA.		
Barboursville	Morris Harvey College	D. W. Shaw, A. M.
Bethany	Bethany College	T. E. Cramblet, LL. D.
Buckhannon	West Virginia Wesleyan College	Carl G. Doney, Ph. D.
Charlestown	Powhatan College	Stewart P. Hatton, LL. D.
Elkins	Davis and Elkins College	James E. Allen, A. B.
Lewisburg	Lewisburg Seminary	Rev. R. L. Telford, D. D.
Morgantown	West Virginia University	Thomas E. Hodges, Ph. D.
WISCONSIN.		
Appleton	Lawrence College	Rev. S. Plantz, LL. D.
Beloit	Beloit College	Rev. Edward D. Eaton, LL. D.
Madison	University of Wisconsin	Charles R. Van Hise, Ph. D.
Milton	Milton College	Rev. Wm. C. Daland, D. D.
Milwaukee	Concordia College	Rev. M. J. F. Albrecht.
Do	Marquette University	Rev. Joseph Grimmelsman, S J.
Do	Milwaukee-Downer College	Miss Ellen C. Sabin, A. M.
Plymouth	Mission House	E. G. Krampe.
Ripon	Ripon College	Silas Evans, D. D.
Watertown	Northwestern University	Rev. A. F. Ernst.
Waukesha	Carroll College	Rev. W. O. Carrier, D. D.
WYOMING.		
Laramie	University of Wyoming	Charles O. Merica, LL. D.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges.

Location.	University or college.	Name of professor or head of department.
University, Ala	University of Alabama	
Fayetteville, Ark	University of Arkansas	Wm. S. Johnson, Ph. D.
Berkeley, Cal	University of California	A. F. Lange, Ph. D.
Los Angeles, Cal	University of Southern Clifornia	Thomas B. Stowell, LL. D.
Do	Occidental College	George F. Cook, Ph. D.
Pasadena, Cal	Throop Polytechnic Institute	A. H. Chamberlain, A. M.
Stanford University, Cal	Leland Stanford Junior University	Ellwood P. Cubberley, Ph. D.
Boulder, Colo	University of Colorado	Frank E. Thompson, B. A.
Colorado Springs, Colo	Colorado College	J. V. Breitwieser, A. M.
University Park, Colo	University of Denver	D. E. Phillips, Ph. D.
Washington, D. C	Catholic University of America	Rev. Thomas E. Shields, Ph. D.
Do	George Washington University	Williston S. Hough, Ph. M.
Do	Howard University (colored)	Lewis B. Moore, Ph. D.
De Land, Fla	John B. Stetson University	Lincoln Hulley, Ph. D., president.
Gainesville, Fla	University of Florida	John A. Thackston, Ph. D.
Athens, Ga	University of Georgia	T. J. Woofter, Ph. D.
Atlanta, Ga	Atlanta University (colored)	George A. Towns, A. M.
Dahlonega, Ga	North Georgia Agricultural College	Gustavus R. Glenn, LL. D., pres.
South Atlanta, Ga	Clark University (colored)	James A. Wilson, Ph. B.
Moscow, Idaho	University of Idaho	Philip H. Soulen, A. M.
Chicago, Ill	University of Chicago	Chas. H. Judd, Ph. D.
Decatur, Ill	James Millikin University	A. R. Taylor, Ph. D., president.
Evanston, Ill	Northwestern University	Herbert F. Fisk, LL. D.
Greenville, Ill	Greenville College	Clark W. Shay, M. S.
Urbana, Ill	University of Illinois	W. C. Bagley, Ph. D.
Bloomington, Ind	Indiana University	Wm. W. Black, A. M.
Crawfordsville, Ind	Wabash College	George H. Tapy, M. A.
Earlham, Ind	Earlham College	J. H. Coffin, Ph. D.
Greencastle, Ind	De Pauw University	Rufus B. Von Kleinsmid, A. M.
Hanover, Ind	Hanover College	Wm. A. Millis, LL. D., president.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges—Continued.

Location.	University or college.	Name of professor or head of department.
Indianapolis, Ind	Butler College	Arthur K. Rogers, Ph. D.
Lafayette, Ind	Purdue University	George L. Roberts, A. M.
Moores Hill, Ind	Moores Hill College	Zenos E. Scott.
Cedar Falls, Iowa	Iowa State Teachers College	Chauncey P. Colgrove, D. Sc.
Cedar Rapids, Iowa	Coe College	Alex. C. Robbie, B. A.
Charles City, Iowa	Charles City College	Frederick Schaub, A. M.
Des Moines, Iowa	Des Moines College	James P. Stephenson, Ph. D.
Do	Drake University	William F. Barr, A. M.
Fayette, Iowa	Upper Iowa University	A. E. Bennett, Ph. D.
Hopkinton, Iowa	Lenox College	P. W. Knuth, A. M.
Indianola, Iowa	Simpson College	Allen Ruggles, A. M.
Iowa City, Iowa	State University of Iowa	F. E. Bolton, Ph. D.
Iowa Falls, Iowa	Ellsworth College	H. T. Dagistan, A. M.
Lamoni, Iowa	Graceland College	R. M. Stewart, A. B.
Mount Pleasant, Iowa	Iowa Wesleyan College	Elmer E. Lymer, B. S.
Mount Vernon, Iowa	Cornell College	George H. Betts, Ph. M.
Pella, Iowa	Central University of Iowa	John D. Dodson, A. M.
Sioux City, Iowa	Morningside College	E. A. Brown, A. M.
Tabor, Iowa	Tabor College	J. F. Crawford, A. M.
Toledo, Iowa	Leander Clark College	Ross Masters, Ph. M.
Atchison, Kans	Midland College	
Baldwin, Kans	Baker University	Lilian Scott, Ph. B.
Emporia, Kans	Emporia College	Mary A. Ludlum, A. M.
Holton, Kans	Campbell College	W. S. Reese, Ph. M.
Lawrence, Kans	University of Kansas	Charles H. Johnston, Ph. D.
Lindsborg, Kans	Bethany College	Anna A. Carlson.
McPherson, Kans	McPherson College	John A. Clement, A. M.
Ottawa, Kans	Ottawa University	Herbert H. Foster, Ph. D.
Salina, Kans	Kansas Wesleyan University	Albert H. King, M. Pd.
Sterling, Kans	Cooper College	Oma Crawley, B. Pd.
Topeka, Kans	Washburn College	Emil C. Wilm, Ph. D.
Wichita, Kans	Fairmount College	Benjamin F. Pittenger, B. Pd.
Do	Friends University	B. W. Truesdell, A. B.
Winfield, Kans	Southwestern Kansas College	Henrietta V. Race, A. M.
Berea, Ky	Berea College	John W. Dinsmore, A. M.
Danville, Ky	Central University of Kentucky	Geo. J. Ramsey, LL. D.
Lexington, Ky	State University	James T. Noe, A. M.
Baton Rouge, La	Louisiana State University and Agricultural and Mechanical College.	Alexander B. Coffey, Ph. D., dean.
New Orleans, La	H. Sophie Newcomb Memorial College	Margaret E. Cross.
Do	Leland University (colored)	R. W. Perkins, Ph. D., president.
Do	Tu ane University of Louisiana	Joseph M. Gwinn, A. M.
Orono, Me	University of Maine	
Baltimore, Md	Johns Hopkins University	Edward F. Buchner, Ph. D.
Do	Morgan College (colored)	Chas. A. Johnson, A. B.
Westminster, Md	Western Maryland College	James Widdowson, A. M.
Boston, Mass	Simmons College	Sarah L. Arnold, A. M.
Cambridge, Mass	Harvard University	Paul H. Hanus, LL. D.
Northampton, Mass	Smith College	Elizabeth K. Adams, Ph. D.
South Hadley, Mass	Mount Holyoke College	Wm. C. Moore, A. M.
Wellesley, Mass	Wellesley College	Anna J. McKeag, Ph. D.
Worcester, Mass	Clark University	W. H. Burnham, Ph. D.
Do	Clark College	
Adrian, Mich	Adrian College	Sarah J. Knott, A. M.
Alma, Mich	Alma College	Albert P. Cook.
Ann Arbor, Mich	University of Michigan	Allen S. Whitney, A. B.
Hillsdale, Mich	Hillsdale College	Charles H. Gurney, A. M.
Holland, Mich	Hope College	Edwin N. Brown, Ph. D.
Kalamazoo, Mich	Kalamazoo College	Herbert L. Stetson, LL. D.
Olivet, Mich	Olivet College	E. G. Lancaster, Ph. D., president.
Minneapolis, Minn	University of Minnesota	George F. James, Ph. D.
St. Paul, Minn	Macalester College	Andrew W. Anderson, A. M.
University, Miss	University of Mississippi	James W. Bell, A. M.
Columbia, Mo	University of Missouri	J. L. Meriam, Ph. D.
Fayette, Mo	Central College	Harvey G. Townsend.
St. Louis, Mo	Washington University	Werrett W. Charters, Ph. D.
Springfield, Mo	Drury College	Wm. Orville Allen, Ph. D.
Missoula, Mont	University of Montana	Wm. F. Book, Ph. D.
Bellevue, Nebr	Bellevue College	Wm. C. T. Adams, Ph. D.
Bethany, Nebr	Cotner University	Jas. A. Beattie, LL. D.
College View, Nebr	Union College	Frederick Griggs, president.
Grand Island, Nebr	Grand Island College	J. B. Shouse, A. B.
Hastings, Nebr	Hastings College	Martin Remp, A. B.
Lincoln, Nebr	University of Nebraska	Charles Fordyce, Ph. D., dean.
University Place, Nebr	Nebraska Wesleyan University	Bertram Everett McProud, A. M.
York, Nebr	York College	Bessie Casebeer, A. B.
Reno, Nev	University of Nevada	Romanzo Adams, Ph. M.
Hanover, N. H	Dartmouth College	Wilmon Henry Sheldon, Ph. D.
New Brunswick, N. J	Rutgers College	E. R. Payson, Ph. D.
Albuquerque, N. Mex	University of New Mexico	Charles E. Hodgin, B. Pd.
Alfred, N. Y	Alfred University	Clarence L. Clarke, Ph. B.

IV.—Professors of Pedagogy and Heads of Departments of Pedagogy in Universities and Colleges—Continued.

Location.	University or college.	Name of professor or head of department.
Brooklyn, N. Y.	Adelphi College	E. N. Henderson, A. M.
Do	Polytechnic Institute of Brooklyn	Fred W. Atkinson, Ph. D., president.
Canton, N. Y.	St. Lawrence University	Robt. D. Ford, M. S.
Clinton, N. Y.	Hamilton College	W. H. Squires, Ph. D.
Elmira, N. Y.	Elmira College	Vida F. Moore, Ph. D.
Hamilton, N. Y.	Colgate University	M. S. Read, Ph. D.
Ithaca, N. Y.	Cornell University	Charles De Garmo, Ph. D.
New York, N. Y.	College of the City of New York	Stephen P. Duggan, Ph. D.
Do	Columbia University (Teachers College)	James E. Russell, LL. D., dean.
Do	New York University	T. M. Balliet, Ph. D.
Do	Normal College of the City of New York	James M. Kieran, LL. D.
Rochester, N. Y.	University of Rochester	George M. Forbes, A. M.
Syracuse, N. Y.	Syracuse University	J. R. Street, Ph. D.
Chapel Hill, N. C.	University of North Carolina	Marcus C. S. Noble.
Durham, N. C.	Trinity College	Eugene C. Brooks, A. B.
Salisbury, N. C.	Livingstone College (colored)	W. R. Connors, A. B.
Wake Forest, N. C.	Wake Forest College	J. Henry Highsmith.
Agricultural College, N. Dak.	North Dakota Agricultural College	Arland D. Weeks, M. A.
Fargo, N. Dak.	Fargo College	Pitt G. Knowlton.
University, N. Dak.	University of North Dakota	Joseph Kennedy, A. M.
Ada, Ohio	Ohio Northern University	H. L. Frank, A. M.
Alliance, Ohio	Mount Union College	John B. Bowman, A. M.
Ashland, Ohio	Ashland College	L. Leedy Garber, A. M.
Berea, Ohio	Baldwin University	Fletcher D. Ward, B. S.
Cincinnati, Ohio	University of Cincinnati	Wm. P. Burris, A. M., dean.
Columbus, Ohio	Ohio State University	Wm. W. Boyd, A. M.
Oberlin, Ohio	Oberlin College	Edward A. Miller, A. B.
Tiffin, Ohio	Heidelberg University	Henry L. Beam, A. M.
Westerville, Ohio	Otterbein University	Walter G. Clippinger, B. D., president.
Wilberforce, Ohio	Wilberforce University (colored)	Sarah C. B. Scarborough, M. Pd.
Yellow Springs, Ohio	Antioch College	W. W. Weaver, A. M.
Norman, Okla.	University of Oklahoma	Walter C. Erwin, Ph. M.
Oklahoma City, Okla.	Epworth University	Benj. F. Nihart, B. S.
Stillwater, Okla.	Oklahoma Agricultural and Mechanical College.	John H. Bowers, Ph. D.
Eugene, Oreg.	University of Oregon	H. D. Shelden, Ph. D.
Salem, Oreg.	Willamette University	Mary E. Reynolds, B. S.
Allentown, Pa.	Muhlenberg College	G. T. Ettinger, Ph. D.
Carlisle, Pa.	Dickinson College	Wm. L. Gooding, Ph. D.
Collegeville, Pa.	Ursinus College	Geo. L. Omwake, A. M., dean.
Bryn Mawr, Pa.	Bryn Mawr College	James H. Leuba, Ph. D.
Huntingdon, Pa.	Juniata College	Charles C. Ellis, Ph. D.
Lewisburg, Pa.	Bucknell University	Thomas A. Edwards, A. M.
Philadelphia, Pa.	Temple University	Charles A. Coulomb, Ph. D.
Do	University of Pennsylvania	A. D. Yocum, Ph. D.
Pittsburgh, Pa.	University of Pittsburgh	Will G. Chambers, M. S.
Selinsgrove, Pa.	Susquehanna University	William Noetling, A. M.
Villanova, Pa.	Villanova College	John C. Fisher, A. M.
Providence, R. I.	Brown University	W. B. Jacobs, A. M.
Columbia, S. C.	University of South Carolina	Patterson Wardlaw, LL. D.
Orangeburg, S. C.	Claflin University (colored)	J. E. Wallace, A. B.
Brookings, S. Dak.	South Dakota Agricultural College	Joseph N. Rodeheaver, Ph. D.
Mitchell, S. Dak.	Dakota Wesleyan University	Samuel Weir, Ph. D.
Vermilion, S. Dak.	University of South Dakota	A. W. Trettien, Ph. D.
Yankton, S. Dak.	Yankton College	Henry K. Warren, LL. D.
Knoxville, Tenn.	University of Tennessee	
Austin, Tex.	University of Texas	W. S. Sutton, LL. D.
Fort Worth, Tex.	Texas Christian University	John W. Kinsey, A. B.
Georgetown, Tex.	Southwestern University	Claude A. Nichols, Ph. B.
Waco, Tex.	Baylor University	Frederick Eby, Ph. D.
Salt Lake City, Utah	University of Utah	Wm. M. Stewart, M. Di.
Burlington, Vt.	University of Vermont and State Agricultural College.	James Franklin Messenger, Ph. D.
Middlebury, Vt.	Middlebury College	Edward D. Collins, Ph. D.
Emory, Va.	Emory and Henry College	J. P. McConnell, Ph. D., acting.
Lynchburg, Va.	Randolph-Macon Woman's College	Wilmot B. Lane, Ph. D.
Salem, Va.	Roanoke College	F. V. N. Painter, A. M.
University, Va.	University of Virginia	Wm. H. Heck, A. M.
Williamsburg, Va.	College of William and Mary	Henry E. Bennett, A. B.
Pullman, Wash.	State College of Washington	Alfred A. Cleveland, Ph. D.
Seattle, Wash.	University of Washington	Edward O. Sisson, Ph. D.
Morgantown, W. Va.	West Virginia University	Jasper N. Deahl, Ph. D.
Beloit, Wis.	Beloit College	Almon W. Burr, A. M.
Madison, Wis.	University of Wisconsin	M. Vincent O'Shea, B. L.
Ripon, Wis.	Ripon College	Wm. J. Mutch, Ph. D.
Waukesha, Wis.	Carroll College	Samuel B. Ray, M. A.
Laramie, Wyo.	University of Wyoming	C. F. Buckle, Ph. D.

V.—Principals of Normal Schools.

1.—*Public normal schools.*

Location.	Name of institution.	Principal.
ALABAMA.		
Daphne	Daphne State Normal School	B. B. Baker.
Florence	State Normal College	James K. Powers.
Jacksonville	State Normal School	C. W. Daugette.
Livingston	Alabama Normal College for Girls	Miss Julia S. Tutwiler.
Montgomery	State Colored Normal School	Wm. B. Patterson.
Moundville	State Normal College	B. F. Smith.
Normal	Agricultural and Mechanical College for Negroes.	Walter S. Buchanan.
Troy	State Normal College	E. M. Shackelford.
ARIZONA.		
Flagstaff	Northern Arizona Normal School	R. H. H. Blome.
Tempe	Tempe Normal School of Arizona	A. J. Matthews.
ARKANSAS.		
Conway	Arkansas State Normal School	J. J. Doyne.
Pine Bluff	Branch Normal College (colored)	W. S. Harris.
CALIFORNIA.		
Chico	State Normal School	Allison Ware.
Fresno	do	C. L. McLane.
Los Angeles	do	Jesse F. Millspaugh.
San Diego	do	Edward L. Hardy.
San Francisco	do	Frederic Burk.
San Jose	do	Morris Elmer Dailey.
COLORADO.		
Greeley	State Teachers College of Colorado	Z. X. Snyder.
Gunnison	State Normal School	C. A. Hollingshead.
CONNECTICUT.		
Bridgeport	Bridgeport City Normal School	Besse E. Howes.
Danbury	State Normal School	John R. Perkins.
New Britain	State Normal Training School	Marcus White.
New Haven	do	Arthur B. Morrill.
Willimantic	do	Henry T. Burr.
DISTRICT OF COLUMBIA.		
Washington	Washington Normal School No. 1	Anne M. Goding.
Do	Washington Normal School No. 2 (colored)	Lucy E. Moten.
FLORIDA.		
Tallahassee	Florida Agricultural and Mechanical College (colored).	Nathan B. Young.
GEORGIA.		
Athens	State Normal School	E. C. Branson.
Milledgeville	Georgia Normal and Industrial College	M. M. Parks.
IDAHO.		
Albion	State Normal School	G. A. Axline.
Lewiston	do	Geo. H. Black.
ILLINOIS.		
Carbondale	Southern Illinois State Normal University	D. B. Parkinson.
Charleston	Eastern Illinois State Normal School	L. C. Lord.
Chicago	Chicago Normal School	Wm. B. Owen.
De Kalb	Northern Illinois State Normal School	John W. Cook.
Macomb	Western Illinois State Normal School	John E. McGilvrey, acting.
Normal	Illinois State Normal University	David Felmley.
INDIANA.		
Indianapolis	Indianapolis Normal School	Miss Marion Lee Webster.
Terre Haute	Indiana State Normal School	William W. Parsons.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
KANSAS.		
Emporia	State Normal School	Joseph H. Hill.
Hays	Western Branch State Normal School	William S. Picken.
Pittsburg	State Manual Training Normal School	R. S. Russ.
KENTUCKY.		
Bowling Green	Western Kentucky State Normal School	H. H. Cherry.
Frankfort	State Normal and Industrial Institute for Colored Persons.	James S. Hathaway.
Louisville	Louisville Normal School	W. J. McConathy.
Richmond	Eastern Kentucky State Normal School	J. G. Crabbe.
LOUISIANA.		
Natchitoches	Louisiana State Normal School	V. L. Roy.
New Orleans	New Orleans Normal School	Miss Margaret C. Hanson.
MAINE.		
Castine	Eastern State Normal School	Albert F. Richardson.
Farmington	Farmington State Normal School	Wilbert G. Mallett, A. B.
Fort Kent	Madawaska Training School	Mary P. Nowland.
Gorham	Western State Normal School	Walter E. Russell.
Lee	Lee Normal Academy	Elmer R. Verrill.
Machias	Washington State Normal School	William L. Powers.
Presque Isle	Aroostook State Normal School	San Lorenzo Merriman.
Springfield	Springfield Normal School	Elmer H. Webber.
MARYLAND.		
Baltimore	Baltimore Teachers Training School	Frank A. Manning.
Do	Colored Training School	Joseph H. Lockerman.
Do	Maryland State Normal School	Sarah E. Richmond.
Bowie	Maryland State Normal and Industrial School (colored).	D. S. S. Goodloe.
Frostburg	Maryland State Normal School No. 2	Reginald H. Ridgely.
MASSACHUSETTS.		
Boston	Boston Normal School	Wallace C. Boyden.
Do	Massachusetts Normal Art School	George H. Bartlett.
Bridgewater	State Normal School	Albert G. Boyden.
Fitchburg	do	John G. Thompson.
Framingham	do	Henry Whittemore.
Hyannis	do	Wm. A. Baldwin.
Lowell	do	Cyrus A. Durgin.
New Bedford	Harrington Normal and Training School	Cora A. Newton.
North Adams	State Normal School	F. F. Murdock.
Salem	do	Joseph Asbury Pitman.
Westfield	do	Clarence A. Brodeur.
Worcester	do	Francis R. Lane.
MICHIGAN.		
Allegan	Allegan County Normal School	Susie M. Ellett.
Berrien Springs	Berrien County Normal School	Blanche Pepple.
Charlevoix	Charlevoix County Normal School	Jessie M. Himes.
Charlotte	Eaton County Normal School	Mrs. Ada M. Carrick.
Cheboygan	Cheyboygan County Normal School	Winifred M. Cubbage.
Croswell	Sanilac County Normal School	G. F. Manning.
Detroit	Washington Normal School	J. F. Thomas.
Flint	Genesee County Normal School	Katherine Schoenhals.
Hart	Oceana County Normal School	Viobenta Harbourne.
Ionia	Ionia County Normal School	Edith E. Williamson.
Ithaca	Gratiot County Normal School	Katharine Carland.
Kalamazoo	Western State Normal School	Dwight B. Waldo.
Kalkaska	Kalkaska County Normal School	Nellie E. Cole.
Ludington	Mason County Normal School	Mrs. Lilly Robinson.
Marquette	State Normal School	James H. B. Kaye.
Marshall	Calhoun County Normal School	Eva Warriner.
Mount Pleasant	Central State Normal School	Chas. T. Grawn.
Muskegon	Muskegon County Normal School	Louise Kilbourne.
Owasso	Shiawassee County Normal School	Mrs. Alice P. Kimball.
Pontiac	Oakland County Normal School	Kate H. Brown.
St. Johns	Clinton County Normal School	Mattie A. Smith.
Saginaw	Saginaw County Normal School	Linda Hankinson.
Standish	Arenac County Normal School	Edna Emings.
Ypsilanti	Michigan State Normal College	Lewis H. Jones.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
MINNESOTA.		
Duluth	State Normal School	E. W. Bohannon.
Mankato	do	Chas. H. Cooper.
Moorhead	do	Frank A. Weld.
St. Cloud	do	W. A. Shoemaker.
St. Paul	Teachers' Training School	L. L. Everly.
Winona	State Normal School	G. E. Maxwell.
MISSISSIPPI.		
Shelby	Shelby Normal Institute (colored)	J. M. Williamson.
MISSOURI.		
Cape Girardeau	State Normal School	W. S. Dearmont.
Jefferson City	Lincoln Institute (colored)	Benjamin F. Allen.
Kirksville	State Normal School	John R. Kirk.
Maryville	do	H. K. Taylor.
St. Louis	Harris Teachers College	John W. Withers.
Springfield	State Normal School	W. T. Carrington.
Warrensburg	do	W. J. Hawkins.
MONTANA.		
Dillon	Montana State Normal School	Henry H. Swain.
NEBRASKA.		
Chadron	State Normal School	Joseph Sparks.
Kearney	do	A. O. Thomas.
Peru	do	D. W. Hayes.
Wayne	do	U. S. Conn.
NEW HAMPSHIRE.		
Keene	State Normal School	Jeremiah M. Rhodes.
Plymouth	do	Ernest L. Silver.
NEW JERSEY.		
Elizabeth	Elizabeth Normal and Training School	Wm. F. Robinson.
Jersey City	Teachers' Training School	Joseph H. Brensinger.
Montclair	New Jersey State Normal School	Chas. S. Chapin.
Newark	Newark Normal and Training School	W. S. Willis.
Paterson	Paterson Normal Training School	Frank W. Smith.
Trenton	New Jersey State Normal School	James M. Green.
NEW MEXICO.		
Las Vegas	New Mexico Normal University	Frank H. H. Roberts.
Silver City	New Mexico Normal School	C. M. Light.
NEW YORK.		
Albany	New York State Normal College	Wm. J. Milne.
Do	Teachers' Training School	C. Edward Jones.
Brockport	State Normal and Training School	Alfred C. Thompson.
Brooklyn	Training School for Teachers	Emma L. Johnston.
Buffalo	State Normal School	Daniel Upton.
Cohoes	Cohoes Training School	Evelyne A. Feek.
Cortland	State Normal and Training School	Francis J. Cheney.
Fredonia	do	Myron T. Dana.
Geneseo	Geneseo State Normal School	James V. Sturges.
New Paltz	State Normal School	John C. Bliss.
New York	New York Training School for Teachers	E. N. Jones.
Oneonta	State Normal School	Percy I. Bugbee.
Oswego	Oswego State Normal and Training School	Isaac D. Poucher.
Plattsburg	State Normal School	Geo. K. Hawkins.
Potsdam	State Normal and Training School	Jeremiah M. Thompson.
Rochester	Rochester Training School	Edith A. Scott.
Syracuse	Syracuse Training School for Teachers	G. A. Lewis.
NORTH CAROLINA.		
Cullowhee	Cullowhee Normal and Industrial School	R. L. Madison.
Elizabeth City	State Colored Normal School	P. W. Moore.
Fayetteville	do	E. E. Smith.
Greenville	East Carolina Teachers Training School	Robt. H. Wright.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
NORTH CAROLINA—con.		
Greensboro	State Normal and Industrial College	J. I. Foust.
Pembroke	Croatan Normal College (Indian)	H. L. Edens.
Winston	Slater Industrial and State Normal School. (colored).	F. M. Kennedy.
NORTH DAKOTA.		
Ellendale	North Dakota State Normal and Industrial School.	W. M. Kern.
Mayville	State Normal School	Thos. A. Hillyer.
Valley City	do	Geo. A. McFarland.
OHIO.		
Akron	Akron Normal School	Lee R. Knight.
Athens	State Normal School	Henry G. Williams.
Cleveland	Cleveland Normal Training School	James W. McLane.
Columbus	Columbus Normal School	Margaret W. Sutherland.
Dayton	Dayton Normal School	Grace A. Greene.
Oxford	State Normal School	H. C. Minnich.
Toledo	Toledo Normal Training School	Mrs. Ella M. R. Baird.
OKLAHOMA.		
Ada	East Central State Normal School	Chas. W. Briles.
Alva	Northwestern State Normal School	Grant B. Grumbine.
Durant	Southeastern State Normal School	E. D. Murdaugh.
Edmond	Central State Normal School	Charles Evans.
Langston	Colored Agricultural and Normal University.	Inman E. Page.
Tahlequah	Northwestern State Normal School	Frank E. Buck.
Weatherford	Southwestern State Normal School	U. J. Griffith.
OREGON.		
Monmouth	State Normal School	J. H. Ackerman.
PENNSYLVANIA.		
Bloomsburg	State Normal School	D. J. Waller, jr.
California	Southwestern State Normal School	Herbert B. Davis.
Clarion	Clarion State Normal School	J. George Becht.
East Stroudsburg	East Stroudsburg State Normal School	E. L. Kemp.
Edinboro	State Normal School	Frank E. Baker.
Indiana	Indiana Normal School of Pennsylvania	James E. Ament.
Kutztown	Keystone State Normal School	A. C. Rothermel.
Lock Haven	Central State Normal School	J. R. Flickinger.
Mansfield	Mansfield State Normal School	Andrew T. Smith.
Millersville	First Pennsylvania State Normal School	E. Oram Lyte.
Muncy	Lycoming County Normal School	H. A. Spotts.
Philadelphia	Philadelphia Normal School for Girls	J. M. Willard.
Reading	Normal and Training School for Girls	Martha A. Seiders.
Shippensburg	Cumberland Valley State Normal School	Samuel A. Martin.
Slippery Rock	Slippery Rock State Normal School	Albert E. Maltby.
West Chester	State Normal School	George M. Philips.
RHODE ISLAND.		
Providence	Rhode Island State Normal School	John L. Alger.
SOUTH CAROLINA.		
Orangeburg	Colored Normal, Industrial, Agricultural, and Mechanical College of South Carolina.	Robert S. Wilkinson.
Rockhill	Winthrop Normal College	D. B. Johnson.
SOUTH DAKOTA.		
Aberdeen	Northern Normal and Industrial School	Geo. W. Nash.
Madison	State Normal School	J. W. Heston.
Spearfish	do	F. L. Cook.
Springfield	do	G. G. Wenzlaff.
TEXAS.		
Canyon City	West Texas State Normal College	R. B. Cousins.
Denton	North Texas State Normal College	W. H. Bruce.
Huntsville	Sam Houston State Normal Institute	H. F. Estill.

V.—Principals of Normal Schools—Continued.

1.—*Public normal schools*—Continued.

Location.	Name of institution.	Principal.
TEXAS—continued.		
Prairie View	Prairie View State Normal and Industrial College (colored).	Ed. L. Blackshear.
San Marcos	Southwest Texas State Normal School	C. E. Evans.
UTAH.		
Cedar City	Southern Branch of the State Normal School.	G. W. Decker.
VERMONT.		
Castleton	State Normal School	Philip R. Leavenworth.
Johnson	do	Lyman R. Allen.
VIRGINIA.		
Farmville	State Female Normal School	J. L. Jarman.
Fredericksburg	State Normal and Industrial School for Women.	E. H. Russell.
Hampton	Hampton Normal and Agricultural Institute (colored).	H. B. Frissell.
Harrisonburg	State Normal and Industrial School for Women.	Julian A. Burruss.
Petersburg	Virginia Normal and Industrial Institute (colored).	J. H. Johnston.
WASHINGTON.		
Bellingham	State Normal School	Edward T. Mathes.
Cheney	do	N. D. Showalter.
Ellensburg	do	W. E. Wilson.
WEST VIRGINIA.		
Athens	State Normal School	C. L. Bemis.
Fairmont	do	O. I. Woodley.
Glenville	do	E. C. Rohrbough.
Huntington	Marshall College, State Normal School	Lawrence J. Corbly.
Institute	West Virginia Colored Institute	Byrd Prillerman.
Shepherdstown	Shepherd College, State Normal School	Thomas C. Miller.
West Liberty	West Liberty State Normal School	John C. Shaw.
WISCONSIN.		
Algoma	Kewaunee County Training School	J. A. Erchinger.
Alma	Buffalo County Training School	H. H. Liebenberg.
Antigo	Langlade County Training School	C. O. Marsh.
Berlin	Green Lake County Training School	Edgar Packard.
Columbus	Columbia County Training School	S. M. Thomas.
Eau Claire	Eau Claire County Training School	W. A. Clark.
Gays Mills	Crawford County Training School	G. E. Pratt.
Grand Rapids	Wood County Training School	M. H. Jackson.
Janesville	Rock County Training School	F. J. Lowth.
La Crosse	State Normal School	F. A. Cotton.
Ladysmith	Rusk County Training School	W. N. Mackin.
Manitowoc	Manitowoc County Training School	Fred Christiansen.
Marinette	Marinette County Training School	A. M. Olson.
Menomonie	Dunn County Training School	G. L. Bowman.
Merrill	Lincoln County Training School	A. H. Cole.
Milwaukee	State Normal School	Charles McKenney.
Monroe	Green County Training School	C. H. Dietz.
New London	Waupaca County Training School	C. B. Stanley.
Oshkosh	State Normal School	John A. H. Keith.
Phillips	Price County Training School	D. A. Swartz.
Platteville	State Normal School	W. J. Sutherland.
Reedsburg	Sauk County Training School	W. E. Smith.
Rhinelander	Oneida County Training School	B. M. Dresden.
Rice Lake	Barron County Training School	John E. Hale.
Richland Center	Richland County Training School	A. A. Thomas.
River Falls	State Normal School	J. W. Crabtree.
St. Croix Falls	Polk County Training School	C. W. Monty.
Stevens Point	State Normal School	John F. Sims.
Superior	Superior State Normal School	V. E. McCaskill.
Viroqua	Vernon County Training School	A. E. Smith.
Wausau	Marathon County Training School	O. E. Wells.
Wautoma	Waushara County Training School	J. H. Wheelock.
Whitewater	State Normal School	George C. Shutts.

V.—Principals of Normal Schools—Continued.

2.—*Private normal schools.*

Location.	Name of institution.	Principal.
ALABAMA.		
Snow Hill	Snow Hill Normal and Industrial Institute (colored).	W. J. Edwards.
Tuskegee	Tuskegee Normal and Industrial Institute (colored).	B. T. Washington.
ARKANSAS.		
Pea Ridge	Pea Ridge Masonic College	S. C. Parish.
CALIFORNIA.		
Berkeley	Oakland Kindergarten Training Class	Grace E. Barnard.
Stockton	Western Normal School	J. R. Humphreys.
COLORADO.		
Denver	Denver Normal and Preparatory School	R. A. Le Doux.
CONNECTICUT.		
Bridgeport	Fannie A. Smith Froebel Kindergarten and Training School.	Fannie A. Smith.
Hartford	Hartford School of Religious Pedagogy	Rev. W. D. Mackenzie.
DISTRICT OF COLUMBIA.		
Washington	Kindergarten Normal Training School	Miss Susan P. Pollock.
FLORIDA.		
Jasper	Jasper Normal Institute	Geo. M. Lynch.
Madison	Florida Normal Institute	W. B. Cate.
Orange Park	Orange Park Normal and Manual Training School (colored).	Mrs. L. St. J. Hitchcock.
GEORGIA.		
Social Circle	Negro Normal and Industrial School	James A. Love.
ILLINOIS.		
Addison	German Evangelical Lutheran Teachers Seminary.	Theo. Brohm.
Chicago	Chicago Kindergarten College	Elizabeth Harrison.
Do	Chicago Kindergarten Institute	Mary B. Page.
Do	Pestalozzi Froebel Kindergarten Training School.	Bertha H. Hegner
Dixon	Dixon College and Normal School	Frederick B. Virden.
Hoopeston	Greer College	E. L. Bailey.
Oregon	Wells School for Teachers	H. W. Sullivan.
INDIANA.		
Angola	Tri-State College	L. M. Sniff.
Danville	Central Normal College	J. W. Laird.
Indianapolis	Teachers College of Indianapolis	Eliza A. Blaker.
Marion	Marion Normal College	C. W. Boucher.
Rochester	Rochester Normal University	F. A. Herrington.
IOWA.		
Bloomfield	Southern Iowa Normal School	H. C. Brown.
Denison	Denison Normal School	W. C. Van Ness.
Perry	Perry Normal School	C. D. Jones.
Shenandoah	Western Normal College	J. M. Hussey.
KANSAS.		
Nickerson	Nickerson College	E. B. Smith.
KENTUCKY.		
Lexington	Chandler Normal School (colored)	Fannie J. Webster.
Louisa	Kentucky Normal College	Walter M. Byington.
Morehead	Morehead Normal School	F. C. Button.
MASSACHUSETTS.		
Boston (1069 Boylston)	Froebel School, Kindergarten Normal Classes.	Annie C. Rust.

V.—Principals of Normal Schools—Continued.

2.—*Private normal schools*—Continued.

Location.	Name of institution.	Principal.
MASSACHUSETTS—contd.		
Boston	Kindergarten Training School	Lucy Wheelock.
Do	Perry Kindergarten Normal School	Annie M. Perry.
Do	Symonds Kindergarten Training School	Lucy H. Symonds.
Cambridge	Lesley Normal School	Edith L. Lesley.
Springfield	Springfield Normal Kindergarten Training School.	Hattie Twichell.
MICHIGAN.		
Detroit	Thomas Normal Training School	Jennie L. Thomas.
Grand Rapids	Grand Rapids Kindergarten Training School.	Clara Wheeler.
Petoskey	Petoskey Normal and Business College	E. L. Warren.
MINNESOTA.		
Madison	Lutheran Normal School	K. Lokensgard.
New Ulm	Dr. Martin Luther College	A. Ackermann.
MISSISSIPPI.		
Tougaloo	Normal Department, Tougaloo University (colored).	Frank G. Woodworth.
MISSOURI.		
Kansas City	Froebel Kindergarten Training School	Elizabeth Moss.
NEBRASKA.		
Fremont	Fremont Normal School	W. H. Clemmons.
Santee	Santee Normal Training School	Alfred L. Riggs.
NEW YORK.		
New York	The Jenny Hunter Kindergarten Training School.	Jenny Hunter.
NORTH CAROLINA.		
Albemarle	Albemarle Normal and Collegiate Institute.	Rev. Geo. H. Atkinson.
Asheville	Normal and Collegiate Institute	Edward F. Childs.
Charlotte	Rowan Normal Industrial Institute	C. S. Somerville.
Franklinton	Albion Academy (colored)	John A. Savage.
Raleigh	St. Augustine School (colored)	Rev. A. B. Hunter.
OHIO.		
Canfield	Northeastern Ohio Normal College	J. Freeman Guy.
Cleveland	Cleveland Kindergarten Training School	Netta Faris.
Dayton	St. Mary's Institute	Brother George Deek.
Ewington	Ohio Southern Normal College	H. W. Woodruff.
Toledo	Law Froebel Kindergarten Training School.	Mary E. Law.
Woodville	Woodville Lutheran Normal School	K. Hemminghaus.
PENNSYLVANIA.		
Cheney	Institute for Colored Youth	Hugh M. Browne.
Philadelphia	Froebellian Training School for Women	Emily D. Wright.
Do	Gratz College (Hebrew Normal)	Rabbi H. M. Speaker.
Do	Miss Hart's Training School for Kindergartners.	Miss C. M. C. Hart.
Pittsburgh	Pittsburg and Allegheny Kindergarten College.	Mrs. James I. Buchanan.
SOUTH CAROLINA.		
Charleston	Avery Normal Institute (colored)	Morrison A. Holmes.
Gaffney	Cherokee Normal and Industrial Institute (colored).	A. A. Sims.
Greenwood	Brewer Normal School (colored)	Rev. J. M. Robinson.
Lancaster	Lancaster Normal and Industrial Institute (colored).	Robert J. Crockette.
SOUTH DAKOTA.		
Sioux Falls	Lutheran Normal School	Rev. Z. J. Ordal.
TENNESSEE.		
Dickson	Dickson College	T. B. Loggins.
Henderson	National Teachers' Normal and Business College.	A. G. Freed.

V.—Principals of Normal Schools—Continued.

2.—*Private normal schools*—Continued.

Location.	Name of institution.	Principal.
TENNESSEE—continued.		
Memphis	Le Moyne Normal Institute (colored)	Ludwig T. Larsen.
Morristown	Morristown Normal Academy (colored)	Judson S. Hill.
Nashville	George Peabody College for Teachers	Bruce R. Payne.
TEXAS.		
Commerce	East Texas Normal College	W. L. Mayo.
Dallas	Dallas Free Kindergarten Training School and Industrial Association.	Mary K. Drew.
VIRGINIA.		
Keysville	Keysville Mission Industrial School (colored).	Wm. H. Hayes.
Lawrenceville	St. Paul Normal and Industrial School (colored).	Rev. James S. Russell.
Richmond	Richmond Training School for Kindergartners.	Lucy S. Coleman.
WEST VIRGINIA.		
Harpers Ferry	Storer College (colored)	Henry T. McDonald.
WISCONSIN.		
Menomonie	Stout Institute	L. D. Harvey.
Milwaukee	National German-American Teachers' Seminary.	Max Griebsch.
St. Francis	Catholic Normal School	Rev. J. M. Kasel.

VI.—American Educational Associations, National and Sectional.

The following list shows, first, the name of the association; second, the name and address of the president; third, the name and address of the secretary; fourth, the place and date of the next meeting.

Agricultural school teachers' association: A. A. Johnson, president, La Crosse county agricultural school, Onalaska, Wis.

American association for the advancement of agricultural teaching: Kirk L. Hatch, Madison, Wis.; W. H. French, East Lansing, Mich.; Columbus, Ohio, November 14, 1911.

American association for the advancement of science, Section L: Edward L. Thorndike, Columbia university, New York, N. Y.; C. Riborg Mann, University of Chicago, Chicago, Ill.; Washington, D. C., December 27, 1911.

American association of college registrars: A. Howry Espenshade, Pennsylvania state college, State college, Pa.; Elizabeth A. Balentine, University of Maine, Orono, Me.; at the time and place of meeting of the National education association, 1912.

American association to promote the teaching of speech to the deaf: A. L. E. Crouter, Mount Airy, Philadelphia, Pa.; Z. F. Westervelt, 1545 St. Paul street, Rochester, N. Y.

American bar association, Section of legal education: Hollis R. Bailey, chairman, 19 Congress street, Boston, Mass.; Charles M. Hepburn, Indiana university law school, Bloomington, Ind.

American federation of the teachers of the mathematical and natural sciences: C. Riborg Mann, University of Chicago, Chicago, Ill.; Eugene R. Smith, Polytechnic preparatory school, Brooklyn, N. Y.; Washington, D. C., December, 1911, with the American association for the advancement of science.

American home economics association: Isabel Bevier, University of Illinois, Urbana, Ill.; Benjamin R. Andrews, Columbia university, New York, N. Y.; Washington, D. C., December 27-30, 1911.

American institute of instruction: Charles W. T. Whitcomb, Brockton, Mass.; Wendall A. Mowry, Central Falls, R. I.

American instructors of the deaf: Edward M. Gallaudet, Hartford, Conn.; Herbert E. Day, 8 Kendall Green, NE., Washington, D. C.

American medical association, Council on medical education: Arthur D. Bevan, chairman, Chicago, Ill.; N. P. Colwell, Chicago, Ill.; Chicago, Ill., February 26, 1912.

American nature-study society: Benjamin M. Davis, Miami university, Oxford, Ohio; Elliot R. Downing, University of Chicago, Chicago, Ill.; Washington, D. C., December 27-28, 1911.

American physical education association: George L. Meylan, Columbia university, New York, N. Y.; James H. McCurdy, International Y. M. C. A. Training school, Springfield, Mass.

American school hygiene association: David L. Edsall, Mattapan, Mass.; Thomas A. Storey, College of the City of New York, New York, N. Y.; Boston, Mass., 1st week in April, 1912.

American school peace league: James H. Van Sickle, Springfield, Mass.; Fannie F. Andrews, 405 Marlborough street, Boston, Mass.; at time and place of meeting of the National education association, 1912.

American society for extension of university teaching: Henry L. Jayne, 505 Chestnut street, Philadelphia, Pa.; Charles D. Atkins, 729–30, Witherspoon building, Philadelphia, Pa.; Philadelphia, Pa., April, 1912.

American society of religious education: L. H. Jones, Ypsilanti, Mich.; Joseph E. Smith, 1859 Mintwood Place, NW., Washington, D. C.

American society of superintendents of training schools for nurses: Mary C. Wheeler, 127 N. Dearborn street, Chicago, Ill.; Jessie E. Catton, Springfield, Mass.; Chicago, Ill., May, 1912.

Association of American agricultural colleges and experiment stations, Section on college work and administration: William D. Gibbs, Durham, N. H.; John F. Duggar, Auburn, Ala.; Columbus, Ohio, November, 1911.

Association of American law schools: Roscoe Pound, Cambridge, Mass.; George P. Costigan, jr., 31 W. Lake street, Chicago, Ill.; meets with the American bar association.

Association of American medical colleges: William P. Harlow, Boulder, Colo.; Fred C. Zapffe, 3431 Lexington street, Chicago, Ill.; Chicago, Ill., February 28, 1912.

Association of American universities: Representative of Leland Stanford junior university, Stanford university, Cal.; Representative of Harvard university, Cambridge, Mass.; Philadelphia, Pa., 1912.

Association of colleges and preparatory schools of the middle states and Maryland: Thomas Fell, Annapolis, Md.; A. H. Quinn, University of Pennsylvania, Philadelphia, Pa.; Columbia university, New York, N. Y., December 1–2, 1911.

Association of colleges and preparatory schools of the Southern states: J. H. Kirkland, Vanderbilt university, Nashville, Tenn.; B. E. Young, Vanderbilt university, Nashville, Tenn.

Association of collegiate alumnæ: Mrs. Alexander F. Morrison, San Francisco, Cal.; Mrs. Samuel F. Clarke, Williamstown, Mass.; Ann Arbor, Mich., November, 1912.

Association of history teachers of the middle states and Maryland: James Sullivan, Boys high school, Brooklyn, N. Y.; Henry Johnson, Columbia university, New York, N. Y.; New York, N. Y., 1912.

Association of mathematics teachers in New England: A. V. Galbraith; Harry D. Gaylord, 98 Hemenway street, Boston, Mass.; Boston, Mass., 2d Saturday after Thanksgiving.

Association of Methodist college presidents: L. H. Murlin, Boston university, Boston, Mass.; W. A. Shanklin, Wesleyan university, Middletown, Conn.; Allegheny college, Meadville, Pa., January 3–4, 1912.

Association of Southern state superintendents of public instruction: D. C. Hull, Jackson, Miss.; H. L. McCleskey, Hazlehurst, Miss.

Association of Southern states rural school supervisors: W. K. Tate, Columbia, S. C.; L. J. Hanifan, Charleston, W. Va.; Nashville, Tenn., with Conference for education in the South.

Association of teachers of mathematics in the middle states and Maryland: Isaac J. Schwatt, University of Pennsylvania, Philadelphia, Pa.; Howard F. Hart, Montclair, N. J.; November, 1911.

Catholic educational association: Thomas J. Shahan, Catholic university, Washington, D. C.; F. W. Howard, 1651 E. Main street, Columbus, Ohio; Pittsburgh, Pa., 1912.

Central association of science and mathematics teachers: Herbert E. Cobb, Lewis institute, Chicago, Ill.; James F. Millis, Francis W. Parker school, Chicago, Ill.; Lewis institute, Chicago, Ill., December 1–2, 1911.

Classical association of the Middle West and South: Walter Miller, University of Missouri, Columbia, Mo.; H. J. Barton, University of Illinois, Champaign, Ill.; Cincinnati, Ohio, April, 1912.

Conference for education in the South: Robert C. Ogden, 125 E. 56th street, New York, N. Y.; Philander P. Claxton, Bureau of Education, Washington, D. C.; Nashville, Tenn , probably April 3–5, 1912.

Dental faculties association of American universities: James G. Sharp, San Francisco, Cal.; Edward C. Kirk, Philadelphia, Pa.; Ann Arbor, Mich., 1912.

Eastern art and manual training teachers' association: C. Valentine Kirby, Buffalo, N. Y.; Eva E. Struble, Newark, N. J.; probably Baltimore, Md., May 1912.

Eastern association of physics teachers: C. S. Griswold, Groton, Mass.; Alfred M. Butler, Boston, Mass.; Cambridge, Mass., December 2, 1911.

Eastern commercial teachers' association: Calvin O. Althouse, Central high school, Philadelphia, Pa.; Frank E. Lakey, English high school, Boston, Mass.; Albany, N. Y., 1912.

Federation of state teachers' associations; Charles S. Foos, Reading, Pa.; W. W. Remington, Denver, Colo.; at time and place of meeting of the National education association, 1912.

Lake Mohonk conference of friends of the Indian and other dependent peoples: James S. Sherman, 1401 Sixteenth street, N. W., Washington, D. C.; Henry S. Haskins, Mohonk Lake, N. Y.; Mohonk Lake, N. Y., October 1912.

Mississippi Valley historical association, Teachers section: E. C Page, chairman, Normal school, DeKalb, Ill.; Howard C. Hill, Oak Park high school, Oak Park, Ill.; Bloomington, Ind., April 3–5, 1912.

Modern language association of America: L. F. Mott, College of the City of New York, New York, N. Y.; C. H. Grandgent, Harvard university, Cambridge, Mass.; Chicago, Ill., December 27–29, 1911.

Music supervisors national conference: C. A. Fullerton, Cedar Falls, Iowa; Miss Hudson, St. Louis, Mo., St. Louis, Mo., Spring, 1912.

Music teachers' national association: P. C. Lutkin, Evanston, Ill.; Francis L. York, Detroit, Mich.; Ann Arbor, Mich., December 26–29, 1911.

National association for the study and education of exceptional children: A. Emil Schmitt, New York, N. Y.; Waldemar H. Groszmann, Plainfield, N. J.; New York university, New York, N. Y., December 1–2, 1911.

National association of dental faculties: C. R. E. Koch, Northwestern university, Dental department, Chicago, Ill.; George E. Hunt, Indiana dental college, Indianapolis, Ind.; Washington, D. C., 2d Monday in September, 1912.

National association of school accounting officers: Joseph A. McBride, Security building, Los Angeles, Cal.; William Dick, City Hall, Philadelphia, Pa.

National association of state universities in the United States of America: William L. Bryan, Indiana university, Bloomington, Ind.; Guy Potter Benton, University of Vermont, Burlington, Vt., probably Washington, D. C., 1912.

National association of teachers in colored schools: W. T. B. Williams, Hampton institute, Hampton, Va.; J. R. E. Lee, Tuskegee institute, Tuskegee, Ala.

National child labor committee: Felix Adler, chairman, 152 W. 77th street, New York, N. Y.; Owen R. Lovejoy, 105 E. 22d street, New York, N. Y.; Louisville, Ky., probably latter part of January 1912.

National commercial teachers' federation: Morton MacCormac, 1208 E. 63d street, Chicago, Ill.; F. M. Van Antwerp, 532 W. Main street, Louisville, Ky.; Spokane, Wash., July 15–19, 1912.

National conference committee on standards of colleges and secondary schools: George E. MacLean, Iowa City, Iowa; Frederick C. Ferry, Williams college, Williamstown, Mass.

National conference on the education of backward, truant, and delinquent children: Bro. Barnabas, Catholic protectory, Lincolndale, N. Y.; Elmer L. Coffeen, Westboro, Mass.; Cleveland, Ohio, June 1912.

National education association: Carroll G. Pearse, Milwaukee, Wis.; Irwin Shepard, 118 W. Wabasha street, Winona, Minn.

National education association, Department of superintendence: Charles E. Chadsey, Denver, Colo.; Harlan Updegraff, Bureau of Education, Washington, D. C.; St. Louis, Mo., February 27–29, 1912.

National German-American teachers' association (Nationaler deutsch-amerikanischer lehrerbund): H. H. Fick, 1828 Fairfax avenue, Cincinnati, Ohio; Emil Kramer, 1334 Broadway, Cincinnati, Ohio; Berlin (Germany) 1912.

National kindergarten association: Edwin S. Marston; Dorothy Perkins, 1 Madison avenue, New York, N. Y.; meetings are held on the third Friday of each month from October to May.

National league of compulsory education officials: William L. Bodine, Tribune building, Chicago, Ill.; Henry J. Gideon, 1522 Cherry street, Philadelphia, Pa.; Milwaukee, Wis., 1912.

National society for broader education: Guy C. Lee, Baltimore, Md.; H. H. Langsdorf, Carlisle, Pa.; New York, N. Y., January 2, 1912.

National society for the promotion of industrial education: W. C. Redfield, American blower company, New York, N. Y.; J. H. Cone, 20 W. 44th street, New York, N. Y.

National society for the study of education: William C. Bagley, University of Illinois, Urbana, Ill.; S. Chester Parker, University of Chicago, Chicago, Ill.; St. Louis, Mo.. during meeting of the Department of superintendence of the National education association.

National society of college teachers of education: Michael V. O'Shea, University of Wisconsin, Madison, Wis.; E. O. Holland, Louisville, Ky.; St. Louis, Mo., during meeting of the Department of superintendence of the National education association.

New England association of chemistry teachers: Frederick C. Adams, Mechanic arts high school, Boston, Mass.; Edward S. Bryant, Everett high school, Everett, Mass.; Boston university, Boston, Mass., November 11, 1911.

New England association of college teachers of education: Anna J. McKeag, Wellesley college, Wellesley, Mass.; Henry W. Holmes, Harvard university, Cambridge, Mass.; Wellesley college, Wellesley, Mass., December, 1911.

New England association of colleges and preparatory schools: Huber G. Buehler, Lakeville, Conn.; Walter B. Jacobs, Brown university, Providence, R. I.

New England association of superintendents: Bernard Sheridan, Lawrence, Mass.; Payson Smith, Augusta, Me.; Boston Latin school, Boston, Mass., November 10, 1911.

New England classical association: William Gallagher, Thayer academy, South Braintree, Mass.; George E. Howes, Williams college, Williamstown, Mass.; Yale university, New Haven, Conn., probably April 5–6, 1912.

New England history teachers' association: W. Scott Ferguson, Cambridge, Mass.; Walter H. Cushing, South Framingham, Mass.; third Saturday in April and October 1912.

New England modern language association: H. C. G. von Jagemann, 113 Walker street, Cambridge, Mass.; P. M. Hayden, Tufts college, Mass.; Boston, Mass., May 11, 1912.

North central association of colleges and secondary schools: Harry Pratt Judson, University of Chicago, Chicago, Ill.; Thomas A. Clark, University of Illinois, Urbana, Ill.; Chicago, March 22–23, 1912.

North central council of state normal school presidents: John A. H. Keith, Oshkosh, Wis.; G. W. Nash, Aberdeen, S. Dak.; Chicago, Ill., 1912.

Pacific manual training teachers' association: Ada F. Blanchard, 154 E. 35th street, Los Angeles, Cal.; George G. Morgan, Santa Monica, Cal.; Los Angeles, Cal., December 1911.

Playground and recreation association of America: Joseph Lee, 101 Tremont street, Boston, Mass.; Howard S. Braucher, 1 Madison avenue, New York, N. Y.

Religious education association: James H. Kirkland, Nashville, Tenn.; Henry F. Cope, 332 South Michigan avenue, Chicago, Ill.; St. Louis, Mo., March 12–14, 1912.

Society for the advancement of education in the South: William M. Slaton, Atlanta, Ga.; H. E. Bierly, Chattanooga, Tenn.; Atlanta, Ga., December 27–29, 1911.

Society for the promotion of engineering education: W. G. Raymond, Iowa state university, Iowa City, Iowa; H. H. Norris, Cornell university, Ithaca, N. Y.

Southern association of college women: May L. Keller, acting president, 1822 Linden avenue, Baltimore, Md.; Caroline Carpenter, The Vauxhall 507, Nashville Tenn.; April 1912.

Southern educational association: M. A. Cassidy, Lexington, Ky.; William F. Feagin, Montgomery, Ala.; Houston, Tex., November 30–December 2, 1911.

Southern industrial educational association: Seth Shepard, 1447 Massachusetts avenue, N. W., Washington, D. C.; Mrs. J. Lowrie Bell, 1459 Girard street, Washington, D. C.; Southern building, Washington, D. C., 1912.

Southern kindergarten association: Miss Marion S. Hanckel, Schoolfield, Va.; Miss C. P. Oppenheimer, 402 Park avenue-E, Savannah, Ga.

Western drawing and manual training association: Fred D. Crawshaw, University of Wisconsin, Madison, Wis.; Oscar L. McMurray, Chicago normal school, Chicago, Ill.; Cincinnati, Ohio, May 1912.

Women's educational and industrial union: Mrs. Mary M. Kehew, 264 Boylston street, Boston, Mass.; Miss Melita Knowles, 264 Boylston street, Boston, Mass.; Boston, Mass., November 14, 1911.

Women's intercollegiate student government association: Constance von Wahl, Barnard college, Columbia university, New York, N. Y.; Rebecca T. Osler, Swarthmore college, Swarthmore, Pa.; Barnard college, Columbia university, New York, N. Y., November 23–26, 1911.

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